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Washington, Friday, September 22, 1950

TITLE 3—THE PRESIDENT

EXECUTIVE ORDER 10162

AUTHORIZING THE APPOINTMENT OF FREDERICK C. KILGUSS TO THE POSITION OF DEPUTY ADMINISTRATIVE ASSISTANT ATTORNEY GENERAL IN THE DEPARTMENT OF JUSTICE WITHOUT COMPLIANCE WITH THE COMPETITIVE PROVISIONS OF THE CIVIL SERVICE RULES AND REGULATIONS

By virtue of the authority vested in me by section 2 of the Civil Service Act (22 Stat. 404) and by section 1753 of the Revised Statutes of the United States, I hereby authorize the appointment of Frederick C. Kilguss to the position of Deputy Administrative Assistant Attorney General in the Department of Justice without compliance with the competitive provisions of the Civil Service Rules and Regulations.

This order is recommended by the Attorney General.

HARRY S. TRUMAN

THE WHITE HOUSE,
September 19, 1950.

[F. R. Doc. 50-8337; Filed, Sept. 20, 1950; 2:05 p. m.]

TITLE 5—ADMINISTRATIVE PERSONNEL

Chapter I—Civil Service Commission

PART 2—APPOINTMENT THROUGH THE COMPETITIVE SYSTEM

EMERGENCY-INDEFINITE APPOINTMENT

Effective upon publication in the FEDERAL REGISTER, a new paragraph (i) is added to § 2.114 as set out below.

§ 2.114 *Temporary appointment* * * *

(i) *Emergency-indefinite appointment pending return of employees from armed forces.* When an employee leaves a position to enter the armed forces, the agency may make an emergency-indefinite appointment to the position pending the return of such employee. Such appointments shall be made from the Commission's registers of eligibles in the same manner as probational appointments. Any eligible who accepts an emergency-indefinite appointment pending return of an employee from the armed forces shall have his eligibility suspended from the register, except for certification for probational appointment in the agency in which serving, until he is separated from such emergency-indefinite appointment. An emergency-indefinite appointment may be terminated as required by the return of the employee from the armed forces but must be terminated not later than five years after entrance on duty. Persons given such appointments do not thereby acquire a permanent civil service status.

(R. S. 1753, sec. 2, 22 Stat. 403; 5 U. S. C. 631, 633. E. O. 9830, Feb. 24, 1947, 12 F. R. 1259; 3 CFR, 1947 Supp.)

UNITED STATES CIVIL SERVICE COMMISSION,
[SEAL] HARRY B. MITCHELL,
Chairman.

[F. R. Doc. 50-8321; Filed, Sept. 21, 1950; 8:50 a. m.]

TITLE 7—AGRICULTURE

Chapter VI—Soil Conservation Service, Department of Agriculture

PART 600—FUNCTION AND PROCEDURE

PROHIBITED ACTS ON LANDS ACQUIRED UNDER OR TRANSFERRED TO TITLE III; CORRECTION

Pursuant to the provisions of section 3 (a) of the Administrative procedure Act of June 11, 1946 (60 Stat. 237, 238, 5 U. S. C. 1002) paragraph (e) of § 600.5 of Chapter VI, Title 7, Code of Federal Regulations, is corrected to read as follows:

§ 600.5 *Prohibited acts on lands acquired under or transferred to Title III*

* * *

(e) *Penalty.* Under the terms of section 32 (f), Title III, of the Bankhead Jones Farm Tenant Act, any violation of this section is punishable as prescribed in section 5388 of the Revised Statutes as amended (18 U. S. C. 104).

(Sec. 4, 49 Stat. 164, sec. 32, 50 Stat. 525, 56 Stat. 725; 7 U. S. C. 1011, 16 U. S. C. 590d)

Issued this 11th day of September 1950.

[SEAL] E. A. NORTON,
Acting Chief,
Soil Conservation Service.

[F. R. Doc. 50-8326; Filed, Sept. 21, 1950; 8:51 a. m.]

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FEDERAL REGISTER

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TITLE 19—CUSTOMS DUTIES

Chapter I—Bureau of Customs, Department of the Treasury

[T. D. 52560]

PART 25—CUSTOMS BONDS

IMMEDIATE DELIVERY AND CONSUMPTION ENTRY BOND

Section 25.4 (a) (10), Customs Regulations of 1943 (19 CFR 25.4 (a) (10)), as amended by T. D. 52403, is hereby further amended to read as follows:

(10) Immediate delivery and consumption entry bond (single entry), customs Form 7551, in an amount equal to the value of the articles, as set forth in the entry, plus the estimated duty[1] (including any taxes required by law to be treated as duties) and the estimated amount of any other taxes imposed upon or by reason of importation, as determined at the time of entry except:

(i) When the merchandise involved will remain in customs custody until (*a*) examination has been completed, (*b*) it is found to be truly and correctly invoiced, and (*c*) it is determined that its release is not precluded by law or regulation and it is entitled to admission into the commerce of the United States, the bond shall be in an amount equal to the aggregate sum of double the estimated amount of ordinary customs duty on the merchandise (including any taxes required by law to be treated as duties) plus the estimated amount of any other tax or taxes on the merchandise collectible by the collector.

(ii) When the merchandise appears to the satisfaction of the collector to be unconditionally free of duty and not prohibited from admission into the commerce of the United States, the amount of the bond may be in such lesser amount (disregarding the value of the articles) as, in the opinion of the collector, will be sufficient to accomplish the purpose for which the bond is given, but in no case less than $100.

(iii) When the bond relates to an application for immediate delivery prior to entry, the amount shall be fixed as above set forth on the basis of the information shown in the application.

(R. S. 161, sec. 624, 46 Stat. 759; 5 U. S. C. 22, 19 U. S. C. 1624. Interprets or applies secs. 485, 623, 46 Stat. 724, as amended, 759, as amended; 19 U. S. C. 1485, 1623)

[SEAL] FRANK DOW,
Commissioner of Customs.

Approved: September 18, 1950.

JOHN S. GRAHAM,
Acting Secretary of the Treasury.

[F. R. Doc. 50-8322; Filed, Sept. 21, 1950; 8:51 a. m.]

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[1] When the bond is to cover merchandise granted a conditional right of entry at a reduced rate of duty, the amount of the bond shall be fixed on the basis of the maximum rate of duty prescribed by the law.

TITLE 24—HOUSING AND HOUSING CREDIT

Chapter VIII—Office of Housing Expediter

[Controlled Housing Rent Reg., Amdt. 285]

[Controlled Rooms in Rooming Houses and Other Establishments Rent Reg., Amdt. 282]

PART 825—RENT REGULATIONS UNDER THE HOUSING AND RENT ACT OF 1947, AS AMENDED

ILLINOIS, NEW JERSEY, WEST VIRGINIA, AND PUERTO RICO

The Controlled Housing Rent Regulation (§§ 825.1 to 825.12) and the Rent Regulation for Controlled Rooms in Rooming Houses and Other Establishments (§§ 825.81 to 825.92) are amended in the following respects:

1. In Schedule C, Item 83, the description of localities affected by declaration for continuance of rent control after December 31, 1950, is amended to read as follows:

In Cook County, the Cities of Calumet City, Chicago and Evanston, the Villages of Arlington Heights, Bedford Park, Glencoe, Justice, Morton Grove, Niles, Riverside and Schiller Park, and all unincorporated localities; in Lake County, the City of Waukegan, the Villages of Antioch and Libertyville, and all unincorporated localities; in Du Page County, the City of Elmhurst and all unincorporated localities; and in Kane County, all unincorporated localities.

This adds to Schedule C the following localities in the Chicago, Illinois, Defense-Rental Area, all based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The Village of Glencoe, Illinois, based on a declaration made on July 13, 1950.

(2) The Village of Justice, Illinois, based on a declaration made on August 3, 1950.

(3) The Village of Riverside, Illinois, based on a declaration made on August 14, 1950.

(4) The Village of Antioch, Illinois, based on a declaration made on August 15, 1950.

(5) The Village of Bedford Park, Illinois, based on a declaration made on August 17, 1950.

(6) The Cities of Elmhurst and Waukegan, Illinois, and the Villages of Arlington Heights and Schiller Park, Illinois, based on declarations made on August 21, 1950.

(7) The Village of Morton Grove, Illinois, based on a declaration made on August 22, 1950.

(8) The City of Calumet City, Illinois, based on a declaration made on August 24, 1950.

2. In Schedule C, Item 88, the description of localities affected by declarations for continuances of rent control after December 31, 1950, is amended to read as follows:

In La Salle County, the Cities of La Salle, Marseilles, Mendota, Oglesby, Ottawa and Streator, and all unincorporated localities.

This adds to Schedule C the following localities in the La Salle County, Illinois, Defense-Rental Area, all based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The City of La Salle, Illinois, based on a declaration made on August 7, 1950.

(2) The City of Ottawa, Illinois, based on a declaration made on August 15, 1950.

(3) The City of Mendota, Illinois, based on a declaration made on August 21, 1950.

(4) The City of Marseilles, Illinois, based on a declaration made on August 28, 1950.

(5) The unincorporated localities in the Defense-Rental Area which are added to Schedule C as of August 21, 1950 by virtue of the fact that declarations have been made by the Cities of Oglesby, Streator, La Salle, Ottawa and Mendota, said cities constituting the major portion of the Defense-Rental Area.

3. In Schedule C, Item 88b, the description of localities affected by declarations for continuance of rent control after December 15, 1950, is amended to read as follows:

In Tazewell County, the Cities of East Peoria and Pekin, and all unincorporated localities; and in Peoria County, the City of Peoria, the Villages of Glasford and Peoria Heights, and all unincorporated localities.

This adds to Schedule C the following localities in the Peoria, Illinois, Defense-Rental Area, all based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The Village of Glasford, Illinois, based on a declaration made on August 7, 1950.

(2) The Village of Peoria Heights, Illinois, based on a declaration made on August 21, 1950.

(3) The City of East Peoria, based on a declaration made on August 29, 1950.

4. In Schedule C, Item 94, the description of localities affected by declarations for continuance of rent control after December 31, 1950, is amended to read as follows:

In Logan County, the City of Lincoln; in Macon County, the Cities of Decatur and Maroa, the Village of Argenta and all unincorporated localities; and in Sangamon County, the City of Springfield and all unincorporated localities.

This adds to Schedule C the following localities in the Springfield-Decatur, Illinois, Defense-Rental Area, all based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The City of Lincoln, Illinois, and the Village of Argenta, Illinois, based on declarations made on August 21, 1950.

(2) The City of Springfield, Illinois, based on a declaration made on August 24, 1950.

(3) The City of Maroa, Illinois, based on a declaration made on August 28, 1950.

(4) The unincorporated localities in the Defense-Rental Area which are added to Schedule C as of August 24, 1950, by virtue of the fact that declarations have been made by the Cities of Decatur, Lincoln and Springfield, Illinois, and the Village of Argenta, Illinois, said municipalities constituting the major portion of the Defense-Rental Area.

5. In Schedule C, Item 188a, the description of localities affected by declarations for continuance of rent control after December 31, 1950, is amended to read as follows:

In Camden County, the City of Camden and the Boroughs of Lindenwold, Oaklyn, and Woodlynne; and in Burlington County, the City of Burlington.

This adds to Schedule C the following localities in the Southern New Jersey Defense-Rental Area, both based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The Borough of Woodlynne, New Jersey, based on a declaration made on August 9, 1950.

(2) The City of Burlington, New Jersey, based on a declaration made on September 5, 1950.

6. In Schedule C, Item 190, the description of localities affected by declarations for continuance of rent control after December 31, 1950, is amended to read as follows:

In Bergen County, the Cities of East Rutherford and North Arlington and the Boroughs of Closter, Fort Lee and Teterboro; in Hudson County, the Cities of Bayonne, Hoboken, Jersey City and Union City, the Town of West New York and the Township of North Bergen; in Union County, the City of Linden and the Borough of Roselle; in Essex County, the City of Newark; in Morris County, the Township of Hanover; and in Monmouth County, the City of Long Branch and the Borough of Red Bank.

This adds to Schedule C the following localities in the Northeastern New Jersey Defense-Rental Area, both based on declarations made by local governing bodies in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended:

(1) The Borough of Closter, New Jersey, based on a declaration made on August 21, 1950.

(2) The Borough of Red Bank, New Jersey, based on a declaration made on September 5, 1950.

7. In Schedule C, Item 354b, the description of localities affected by declarations for continuance of rent control after December 31, 1950, is amended to read as follows:

In Raleigh County, the Towns of Mabscott and Sophia.

This adds to Schedule C the Town of Mabscott, West Virginia, a portion of the Bluefield, West Virginia, Defense-Rental Area, based on a declaration made on July 24, 1950 by the local governing body of said Town in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended.

8. In Schedule C, Item 371, the description of localities affected by declarations for continuance of rent control after December 31, 1950, is amended to read as follows:

In Puerto Rico, the Municipalities of Carolina, Cayey, Cidra, Corozal, Isabella, Loiza, Naranjito, San Lorenza and San Sebastian.

This adds to Schedule C the Municipality of Corozal in the Puerto Rico Defense-Rental Area, based on a declaration made on August 29, 1950, by the local governing body of said Municipality in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947 as amended.

9. The following new items are incorporated in Schedule C:

Name of defense-rental area, State, and localities affected by declarations for continuance of rent control after December 31, 1950.

(83b) Crab Orchard, Illinois; in Jackson County, the City of Carbondale; and in Williamson County, the City of Herrin.

(86) Joliet, Illinois; in Will County, the Cities of Joliet and Lockport and the Village of Rockdale.

(87) Kankakee, Illinois; in Kankakee County, the Villages of Bourbonnais and Bradley.

(89) Quad Cities, Illinois; in Rock Island County, the City of East Moline.

(174) St. Louis, Mo., Illinois; in Madison County, the City of Madison; and in St. Clair County, the City of East St. Louis and the Village of New Athens.

This addition to Schedule C is based upon declarations made in accordance with section 204 (f) (1) of the Housing and Rent Act of 1947, as amended, by the local governing bodies of the following localities:

(1) The City of Joliet, Illinois, based on a declaration made on July 24, 1950.

(2) The Village of Rockdale, Illinois, based on a declaration made on July 28, 1950.

(3) The Village of New Athens, Illinois, based on a declaration made on August 7, 1950.

(4) The City of East St. Louis, Illinois, based on a declaration made on August 9, 1950.

(5) The Cities of East Moline and Lockport, Illinois, and the Villages of Bradley and Bourbonnais, Illinois, based on declarations made on August 21, 1950.

(6) The City of Herrin, Illinois, based on a declaration made on August 28, 1950.

(7) The Cities of Carbondale and Madison, Illinois, based on declarations made on August 29, 1950.

(Sec. 204, 61 Stat. 197, as amended; 50 U. S. C. App. Supp. 1894)

This amendment shall be effective with respect to each locality covered thereby as of the date on which the declaration affecting that locality was made.

Issued this 19th day of September 1950.

ED DUPREE,
Acting Housing Expediter.

[F. R. Doc. 50-8320; Filed, Sept. 21, 1950; 8:50 a. m.]

TITLE 29—LABOR

Chapter V—Wage and Hour Division, Department of Labor

PART 522—EMPLOYMENT OF LEARNERS

SINGLE PANTS, SHIRTS AND ALLIED GARMENTS, WOMEN'S APPAREL, SPORTSWEAR AND OTHER ODD OUTERWEAR, RAINWEAR, ROBES AND LEATHER AND SHEEP-LINED GARMENTS DIVISIONS OF THE APPAREL INDUSTRY

By notice dated August 18, 1950, and published in the FEDERAL REGISTER on August 25, 1950 (15 F. R. 5701), the Administrator of the Wage and Hour Division, United States Department of Labor, announced the adoption, effective September 25, 1950, of amended regulations governing the employment of learners in the single pants, shirts and allied garments, women's apparel, sportswear and other odd outwear, rainwear, robes and leather and sheep-lined garments divisions of the apparel industry (29 CFR 522.160–522.166).

Upon further consideration of said amended regulations, as published, it has been determined that several sections thereof require formal correction and clarification. Accordingly, pursuant to the authority vested in me under section 14 of the Fair Labor Standards Act, as amended, notice is hereby given that, effective September 25, 1950, the following amendments to said amended regulations, are adopted:

1. Section 522.161 (a) (1) is amended to read as follows:

(1) Women's Apparel, defined as follows: The production of women's, misses' and juniors' dresses, washable service garments and blouses from woven or purchased knit fabric, women's, misses', children's and infants' underwear, nightwear and negligees from woven fabrics; corsets and other body supporting garments from any material; other garments similar to the foregoing; and infants' and children's outerwear.

2. Section 522.162 (a), Column B (1) and (2) is amended as follows:

B. Duration of learning period.
Maximum learning period of 480 hours [1] for any occupation listed in Column A (1), but not more than a 320-hour learning period in such occupation if, within the previous 2 years, the worker had 160 hours or more of experience in another occupation listed.
Maximum learning period of 160 hours.[1]

---

[1] If, within the previous 2 years, the worker has been employed for less than 480 hours in any occupation listed in Column A (1), or for less than 160 hours in the occupation of final inspection of assembled garments specified in Column A (2), and is being trained as a learner in the same occupation, the number of hours of previous employment should be deducted from the applicable maximum learning period.

3. Section 522.162 (b), Column B (1) and (2) is amended to read as follows:

B. Duration of Learning Period
Maximum learning period of 480 hours [1] in any occupation listed in Column A (1), but not more than a 320-hour learning period in such occupation if, within the previous 2 years, the worker had 160 hours or more of experience in another occupation listed: *Provided, however,* That the maximum learning period prescribed in this column in any occupation listed in Column A (1), except pressing, is extended by 160 additional hours for learners hired prior to Jan. 1, 1951.[1a]
Maximum learning period of 160 hours.[1]

[1] If, within the previous 2 years, the worker has been employed for less than 480 hours in any occupation listed in Column A (1), or for less than 160 hours in the occupation of final inspection of assembled garments specified in Column A (2), and is being trained as a learner in the same occupation, the number of hours of previous employment should be deducted from the applicable maximum learning period.

[1a] The 160 additional hours for learners hired prior to January 1, 1951, does not apply to workers who, prior to September 25, 1950, completed the maximum learning period authorized under special certificates issued pursuant to previous regulations.

(Sec. 14, 52 Stat. 1068; 29 U. S. C. 214)

Signed at Washington, D. C. this 18th day of September 1950.

WM. R. MCCOMB,
Administrator, Wage and Hour Division, United States Department of Labor.

[F. R. Doc. 50-8293; Filed, Sept. 21, 1950; 8:46 a. m.]

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

Chapter II—Corps of Engineers, Department of the Army

PART 203—BRIDGE REGULATIONS

MISCELLANEOUS AMENDMENTS

Pursuant to the provisions of section 5 of the River and Harbor Act of August 18, 1894 (28 Stat. 362; 33 U. S. C. 499), § 203.335 is hereby revoked, §§ 203.10, 203.75, 203.190 (f), 203.225 (f), 203.245, 203.700, 203.706 (c), 203.711, and 203.714 (c) (1) are hereby amended, the cross reference note following § 203.700 is changed so as to follow § 203.706, and §§ 203.430 and 203.680 are hereby prescribed, as follows:

§ 203.10 *Kennebec River, Me.; Bridges.* (a) The regulations in this section shall govern the operation of the following bridges of the Maine State Highway Commission across Kennebec River, Maine:

(1) Highway and railroad bridge between Bath and Woolwich.

(2) Highway bridge between Richmond and Dresden.

(3) Highway bridge between Gardiner and Randolph.

(b) The owners of or agencies controlling these bridges shall provide the necessary tenders and the proper mechanical appliances for the safe, prompt, and efficient opening of the draws for the passage of vessels.

(c) Except as otherwise provided in paragraphs (d) and (e) of this section, the draw of each bridge shall, upon receiving the prescribed call signal, be opened promptly for the passage of any vessel or other watercraft not able to pass under the closed bridge.

(d) The draw of the bridge between Bath and Woolwich shall not be opened when a train is approaching so closely that it cannot safely be stopped before reaching the bridge, or when a passenger or mail train is approaching within sight or hearing of the draw tender.

(e) The draws of the bridges between Richmond and Dresden and between Gardiner and Randolph shall not be required to be opened between 9:00 p. m. and 5:00 a. m. except when advance notice of the time an opening is desired is given to the draw tender in person or by telephone or letter. The owners of or agencies controlling these bridges shall provide arrangements whereby the draw tenders can be readily reached by telephone or otherwise at any time between 5:00 a. m. and 9:00 p. m. Notices stating exactly how the draw tender may be reached shall be posted in the same manner as the copies of the regulations posted in accordance with paragraph (i) of this section.

(f) Sound signals: To be used if weather conditions are such that sound signals can be heard.

(1) *Call signal for opening of draw.* Three distinct blasts of a whistle, horn, or megaphone, or three loud and distinct strokes of a bell, sounded within reasonable hearing distance of the bridge.

(2) *Acknowledging signals*—(i) *When draw can be opened immediately.* Same as call signal.

(ii) *When draw cannot be opened immediately.* Two distinct blasts of a whistle, horn, or megaphone, or two loud and distinct strokes of a bell.

(g) Visual signals: To be used if weather conditions are such that sound signals may not be heard.

(1) *Call signal for opening of draw.* A flag by day or a lighted lantern by night, swung in circles at arm's length.

(2) *Acknowledging signals*—(i) *When draw can be opened immediately.* A flag by day or a lighted lantern by night, raised and lowered in vertical plane a number of times.

(ii) *When draw cannot be opened immediately.* A flag by day or a lighted lantern by night, swung to and fro horizontally a number of times.

(h) Trains and vehicles shall not be stopped on a bridge for the purpose of delaying its opening, nor shall watercraft be handled so as to hinder or delay the operation of the draw, but all passage over or through a bridge shall be prompt to prevent delay to either land or water traffic.

(i) The owners of or agencies controlling each bridge shall keep conspicuously posted on both the upstream and downstream sides thereof, in such manner that it can be read easily at any time, a copy of the regulations in this section.

§ 203.75 *Boston Harbor, Mass., and adjacent waters; bridges.* (a) The regulations in this section shall govern the operation of all drawbridges across Boston Harbor, Massachusetts, including the following waters in and adjacent thereto:

(1) Chelsea River.

(2) Mystic River.

(3) Malden River (excluding the Massachusetts Department of Public Works highway bridge at Medford Street, Malden).

(4) Little Mystic Channel.

(5) Charles River.

(6) Fort Point Channel.

(7) Reserved Channel.

(8) Neponset River.

(9) Weymouth Fore River.

(10) Weymouth Back River.

(b) The owners of or agencies controlling the bridges shall provide the necessary tenders and the proper mechanical appliances for the safe, prompt, and efficient opening of the draws for the passage of vessels and for assisting vessels while passing through the draws. They shall also provide and maintain in good order on the bridge piers or fenders such fixtures as may be necessary to vessels in mooring or making fast while waiting for the draws to open.

(c) Except as otherwise provided in paragraphs (g) to (i), inclusive, of this section, the draw of each bridge shall, upon verbal request or upon receiving the prescribed call signal, be opened promptly for the passage of any vessel or other watercraft not able to pass under the closed bridge: *Provided,* That the draw shall not be opened when a train or vehicle is approaching so closely that it cannot safely be stopped before reaching the draw: *Provided further,* That when any draw shall have been open for 10 minutes or longer it may be closed to permit any waiting trains, vehicles, or persons to cross, and after being so closed for 10 minutes or for such shorter time as may be necessary it shall again be opened promptly for the passage of vessels or other watercraft if there be any such desiring to pass.

NOTE: The length of time that a draw has been open shall be computed from the time the draw begins to move in opening, and the length of time that a draw has been closed shall be computed from the time that the draw ceases to move in closing.

(d) Signals:

(1) *Call signal for opening of draw.* Two long blasts followed immediately by two short blasts, sounded within signalling distance of the bridge: *Provided,* That the call signal for the city of Boston bridge across Chelsea River connecting Meridian Street, East Boston, and Pearl Street, Chelsea, shall be two long blasts followed immediately by two short blasts and one long blast: *Provided further,* That the call signal for those bridges across Mystic River, Charles River, and Fort Point Channel referred to in paragraphs (g), (h), and (i) of this section, to be given by vessels entitled to passage during closed periods under the provisions of paragraphs (f) to (i), inclusive, of this section, shall be four long blasts.

(2) *Acknowledging signals*—(i) *When draw can be opened immediately.* Three long blasts.

(ii) *When draw cannot be opened immediately.* Two long blasts.

NOTE: As used in this section, the term "long blasts" means distinct blasts of a whistle or horn of three seconds' duration, and the term "short blasts" means distinct blasts of a whistle or horn of one second's duration.

(e) Trains and vehicles shall not be stopped on a bridge for the purpose of delaying its opening, nor shall watercraft be handled so as to hinder or delay the operation of the draw, but all passage over or through a bridge shall be prompt to prevent delay to either land or water traffic.

(f) The general regulations contained in paragraphs (a) to (e), inclusive, of this section shall apply to all bridges except as modified by the special regulations contained in paragraphs (g) to (i), inclusive, of this section, prescribed where local conditions require to govern the operation of certain bridges. The special regulations shall not apply to vessels owned or controlled by United States Government or to vessels employed by the city of Boston or other municipality for police and fire protection. All such United States and municipal vessels shall be passed without delay through the draws of all bridges at any hour day or night.

(g) Mystic River:

(1) *Bridges from mouth to and including Boston and Maine Railroad bridge between Somerville and Medford.* The draws of these bridges shall not be required to be opened for the passage of vessels whose draft is less than 18 feet between 7:45 and 9:00 a. m., 9:10 and 10:00 a. m., and 5:00 and 6:00 p. m., except on Sundays and on legal holdays observed in the locality: *Provided*, That any vessel or other watercraft proceeding either upstream or downstream which has passed any of these bridges shall be afforded continuous passage through the succeeding bridges.

(2) *Metropolitan District Commission highway bridge opposite Harvard Street, Medford.* (i) The owner of or agency controlling this bridge will not be required to keep a draw tender in constant attendance.

(ii) Whenever a vessel unable to pass under the closed bridge desires to pass through the draw between 8:00 a. m. and 4:30 p. m. on all days other than Sundays and legal holidays observed in the locality, notice to that effect shall be given to the Superintendent of Bridges, Metropolitan District Commission, Charles River Dam, Boston, Massachusetts, at least one hour in advance of the time passage is desired. Whenever an opening is required between 4:30 p. m. and 8:00 a. m. on all days other than Sundays and legal holidays observed in the locality, notice to that effect shall be given to the Superintendent of Bridges not later than 4:00 p. m. Whenever an opening is required on a Sunday or a legal holiday observed in the locality, notice to that effect shall be given to the Superintendent of Bridges not later than 4:00 p. m. of the day preceding the Sunday or holiday on which the opening is required. In case of emergency, the draw shall be opened promptly upon notification.

(iii) The owner of or agency controlling the bridge shall keep conspicuously posted on both the upstream and downstream sides of the bridge, in such manner that it can easily be read at any time, a copy of the special regulations in this paragraph pertaining to the bridge together with a notice stating how the Superintendent of Bridges may be reached.

(h) Charles River: The draws of the bridges from the mouth to and including the Metropolitan District Commission bridge between Boston and Cambridge (at Charles River Dam) shall not be required to be opened for the passage of vessels between 6:15 and 9:10 a. m. and 4:15 and 7:40 p. m., except on Sundays and on legal holidays observed in the locality: *Provided*, That when high tide at Charleston Navy Yard occurs between 6:15 and 9:10 a. m. the draws shall be opened within 45 minutes before or after high tide for a period of 10 minutes for the passage of all vessels or other watercraft whose draft is 12 feet or over if there be any such desiring to pass, the exact time of opening to be prescribed by the railroad companies, due regard being had for causing minimum interference with railroad schedules, highway traffic, and the interests of navigation, and the opening time of each bridge to be so fixed as to permit continuous passage through the next and following bridges located in direction of course of the vessels or other watercraft.

(i) Fort Point Channel:

(1) *City of Boston highway bridges at Northern Avenue, Congress Street, and Sumner Street.* The draws of these bridges shall not be required to be opened for the passage of vessels whose draft is less than 18 feet between 6:30 and 7:05 a. m., 7:15 and 8:00 a. m., 8:10 and 9:00 a. m., 4:30 and 5:20 p. m., 5:30 and 6:20 p.m., and 6:30 and 7:00 p. m., except on Sundays and on legal holidays observed in the locality: *Provided*, That any vessel or other watercraft proceeding either upstream or downstream which has passed any of these bridges shall be afforded continuous passage through the succeeding bridges.

(2) *Bridges upstream from Sumner Street Bridge.* The draws of these bridges shall not be required to be opened for the passage of vessels between 6:15 and 9:10 a. m. and 4:15 and 7: 40 p. m., except on Sundays and on legal holidays observed in the locality: *Provided*, That when high tide at Charlestown Navy Yard occurs between 6: 15 and 9: 10 a. m. the draws shall be opened within 45 minutes before or after high tide for a period of 10 minutes for the passage of all vessels or other watercraft whose draft is 12 feet or over if there may be any such desiring to pass, the exact time of opening to be prescribed by the railroad companies, due regard being had for causing minimum interference with railroad schedules, highway traffic, and the interests of navigation, and the opening time of each bridge to be so fixed as to permit continuous passage through the next and following bridges located in direction of course of the vessels or other watercraft.

§ 203.190 *Navigable waters in the State of New York and their tributaries; bridges where constant attendance of draw tenders is not required.* * * *

(f) The bridges to which this section applies, and the regulations applicable in each case, are as follows:

* * * * *

(8) Tonawanda Creek; The New York Central Railroad Company bridge between Tonawanda and North Tonawanda. From December 16 to March 31, inclusive, at least 12 hours' advance notice required. From April 1 to December 15, inclusive, the bridges shall be left in full open position whenever a draw tender is not in attendance.

§ 203.225 *Navigable waters in the State of New Jersey; bridges where constant attendance of draw tender is not required.* * * *

(f) The bridges to which this section applies, and the regulations applicable in each case, are as follows:

* * * * *

(3–a) Woodbridge Creek; The Central Railroad Company of New Jersey bridge at Maurer. At least four hours' advance notice required.

* * * * *

§ 203.245 *Navigable waters discharging into the Atlantic Ocean south of and including Chesapeake Bay and into the Gulf of Mexico, except the Mississippi River and its tributaries and outlets; bridges where constant attendance of draw tenders is not required.* * * *

(h) *Waterways discharging into Atlantic Ocean south of Charleston.* * * *

(10) Savannah River, S. C. and Ga.; Charleston & Western Carolina Railway Company bridge near Augusta, Ga. At least three hours' advance notice required.

(11) Ogeechee River, Ga.; * * *

(12) Altamaha River, Oconee River, and Ocmulgee River, Ga. * * *

(13) Satilla River, Ga.; * * *

(14) Nassau Sound, Fla.; * * *

(15) Clapboard Creek and Broward River (Cedar Creek), Fla.; * * *

(16) St. Johns River, Fla.; Florida East Coast Railway Company bridge at Cook's Ferry. * * *

* * * * *

(j) *Waterways discharging into Gulf of Mexico west of Mississippi River.* * * *

(26) Nueces Bay, Tex.; Texas Highway Department bridge between Corpus Christi and Portland. On Sundays, Texas State holidays, and National holidays, and between 9:00 p. m. and 6:00 a. m. on all other days, advance notice required; to be given prior to 8:00 p. m. on a day a draw tender is required to be in attendance: *Provided*, That during a hurricane alert or in the event of a major disaster affecting the Nueces Bay area a draw tender shall be in constant attendance and the draw opened promptly on signal.

§ 203.335 *Aquia Creek, Va.; bridge of Richmond, Fredericksburg and Potomac Railroad.* [Revoked.]

§ 203.430 *St. Johns River, Fla.; State Road Department of Florida bridge (Acosta Bridge) between Riverside Avenue viaduct, Jacksonville, and Miami Road, South Jacksonville.* (a) Between 7:30 a. m. and 9:00 a. m., and between 4:30 p. m. and 6:00 p. m., on all days other than Sundays and legal holidays, the draw need not be opened for the passage of vessels: *Provided*, That the draw shall be opened at any time for the passage of a vessel in an emergency involving danger to life or property, which shall be indicated by four blasts of a whistle, horn, or megaphone.

(b) In all other respects, the regulations contained in this section shall govern the operations of this bridge.

§ 203.680 *Trail Creek, Ind.; The Michigan Central Railroad Company bridge, Michigan City.* (a) The draw shall be opened promptly on signal for the passage of vessels between 6:30 a. m. and 2:30 p. m. daily, except Sundays, from February 16 to December 14, inclusive, of each year.

(b) From December 15 to February 15, inclusive, on all Sundays, and between 2:30 p. m. and 6:30 a. m. on all other days, the owner of or agency controlling the bridge need not keep a draw tender in constant attendance.

(c) Whenever a vessel, unable to pass under the closed bridge, desires to pass through the draw during one of the periods specified in paragraph (b) of this section and a draw tender is not in attendance, the Chief Dispatcher, The Michigan Central Railroad Company, Chicago, Illinois, shall be so notified by telephone (collect). The Chief Dispatcher shall then make arrangements for the draw to be opened within 20 minutes after notification or at such other time as may be specified in the notice.

(d) The owner of or agency controlling the bridge shall keep conspicuously posted on both the upstream and downstream sides thereof, in such manner that it can easily be read at any time, a copy of the regulations in this section together with a notice stating exactly how the Chief Dispatcher may be reached by telephone.

§ 203.700 *Saginaw River, Mich.; bridges.* (a) The owners of or agencies controlling drawbridges across the Saginaw River shall provide the necessary tenders and the proper mechanical appliances for the safe, prompt, and efficient opening of the draws for the passage of vessels.

(b) Sound signals: To be used if weather conditions are such that sound signals can be heard:

(1) *Call signal for opening of draw.* One long blast, two short blasts, and one long blast of a whistle, horn, or siren, repeated at intervals until the acknowledging signal is received from the bridge: *Provided*, That when a vessel is about to leave a point between two drawbridges and within sight of hearing of both to pass through the draw upstream, the call signal shall be followed after a brief interval by an additional short blast.

(2) *Acknowledging signals*—(i) *When draw can be opened immediately.* Same as call signal.

(ii) *When draw cannot be opened immediately, or when it is open and must be closed immediately.* Four or more short and rapid blasts of a whistle, horn, or siren, or four or more sharp and rapid strokes of a bell, repeated at intervals until acknowledged by the vessel. The vessel shall acknowledge by one long blast followed by one short blast.

(c) Visual signals: To be used in conjunction with sound signals if weather conditions are such that sound signals may not be heard:

(1) *Call signal for opening of draw.* A white flag by day or a white light by night, swung in full circles at arm's length in full sight of the bridge and facing the draw.

(2) *Acknowledging signals*—(i) *When draw can be opened immediately.* A white flag by day or a green light by night swung up and down vertically a number of times in full sight of the vessel.

(ii) *When draw cannot be opened immediately, or when it is open and must be closed immediately.* A red flag by day or a red light by night, swung to and fro horizontally in full sight of the vessel, repeated until acknowledged by the vessel. The vessel shall acknowledge by the same signal.

(d) Trains and vehicles shall not be stopped on a bridge for the purpose of delaying its opening, nor shall watercraft be handled so as to hinder or delay the operation of the draw, but all passage over or through a bridge shall be prompt to prevent delay to either land or water traffic.

(e) Except as otherwise provided in paragraph (g) of this section, the draw of each bridge shall, upon receiving the prescribed call signal, be opened promptly for the passage of any vessel or other watercraft of 20 tons or more not able to pass under the closed bridge: *Provided*, That the opening of the draw of a railroad bridge may be delayed not to exceed five minutes after receipt of signal to permit the passage thereover of a mail or passenger train which is ready to cross at the time the signal is given.

(f) Except as otherwise provided in paragraph (g) of this section, the draw of each bridge shall, upon receiving the prescribed call signal, be opened as soon as practicable for the passage of any vessel or other watercraft of less than 20 tons: *Provided*, That no such vessel shall be delayed for a longer period than 15 minutes.

(g) Special regulations for bridges at Saginaw: (1) The owners of or agencies controlling drawbridges at Saginaw need not keep draw tenders in constant attendance.

(2) For openings of the draws of the City of Saginaw highway bridge at Sixth Avenue and bridges upstream therefrom below the Court Street fixed bridge, from November 16, to March 31, inclusive, and between 11:00 p. m. and 7:00 a. m. from April 1 to November 15, inclusive, at least three hours' advance notice is required.

(3) For openings of the draws of bridges upstream from the Court Street fixed bridge, at least 24 hours' advance notice is required.

(4) Advance notice as required by this paragraph shall be given to the Bridge Operations Officer, Police Department, City of Saginaw, whose telephone number is 8191. Charges for long-distance telephone calls directed to that officer may be reversed. In the case of bridges which are not owned or controlled by the City of Saginaw, the Bridge Operations Officer shall be responsible for relaying the necessary information to the owners or agencies concerned. Advance notice shall include the name of the vessel, its location at the time notice is given, if inbound the exact destination and expected time of arrival, and if outbound the point and time of departure. The actual opening in each case will be accomplished only after exchange of the prescribed signals.

(h) The owner of or agency controlling each bridge shall keep conspicuously posted on both the upstream and downstream sides thereof, in such manner that it can be easily read at any time, a copy of the regulations in this section pertaining to the particular bridge.

CROSS REFERENCE: Black Rock Canal, Ferry Street Bridge, see § 207.590. (This note eliminated.)

§ 203.706 *Sandusky Bay, Ohio.*

(c) *The New York Central Railroad Company Bridge across East Cove at foot of Washington Street, Sandusky.* (1) The draw shall be in full open position at all times from March 16 to December 31, inclusive, except that it may be closed five minutes in advance of the time a train is expected to cross the bridge. The cycle of the draw from open position through closed position to open position shall not exceed 20 minutes.

* * * * *

(4) From January 1 to March 15, inclusive, whenever a vessel unable to pass under the closed bridge desires to pass through the draw, at least 24 hours' advance notice of the time the opening is required shall be given to the authorized representative of the owner of or agency controlling the bridge.

(5) Upon receipt of such advance notice, the authorized representative shall arrange for the prompt opening of the draw at the time specified in the notice for the passage of the vessel.

(6) The owner of or agency controlling the bridge shall keep conspicuously posted on both sides thereof, in such manner that it can be easily read at any time, a copy of the regulations in this paragraph together with a notice stating exactly how the representative specified in subparagraph (4) of this paragraph may be reached.

CROSS REFERENCE: Black Rock Canal, Ferry Street Bridge, see § 207.590. (This note added.)

§ 203.711 *Los Angeles and Long Beach Harbors, Calif.*—(a) *Entrance Channel to Long Beach Inner Harbor; pontoon bridge.* (1) The call signal for opening the draw shall be one long blast followed by two short blasts. This signal shall be acknowledged by two long blasts followed by one short blast when the draw can be opened immediately, and by two long blasts when the draw cannot be opened immediately.

NOTE: As used in this section, the term "long blasts" means distinct blasts of a whistle or horn or calls through a megaphone of four seconds' duration, and the term "short blasts" means distinct blasts of a whistle or horn or calls through a megaphone of one second's duration.

(2) The owner of or agency controlling this bridge shall keep conspicuously posted on the south and north sides thereof, in such manner that they can be easily read from approaching vessels, signs showing the call and acknowledging signals prescribed in subparagraph (1) of this paragraph.

(b) *Cerritos Channel; Commodore Schuyler F. Heim highway bridge, and Henry Ford (Badger) Avenue railroad and highway bridge approximately 130 feet westerly thereof.* (1) From 7:30 a. m. to 8:00 a. m. and from 4:30 p. m. to 5:00 p. m. daily, except Saturdays, Sundays, and holidays, the draw of the Commodore Schuyler F. Heim bridge shall not be opened for the passage of vessels except in case of emergency. The draw of the Henry Ford Avenue bridge shall be opened with the least possible delay at any time on receiving the prescribed signal.

* * * * *

§ 203.714 *San Joaquin River and its tributaries, Calif.* * * *

(c) *Middle River*—(1) *The Atchison, Topeka, and Santa Fe Railway Company bridge near Middle River Station.* (i) The signal for opening this bridge shall be two long blasts followed by one short blast.

(ii) On Sundays and national holidays, and between 5:00 p. m. and 8:00 a. m. on all other days, at least 12 hours' advance notice required, to be given to the railway company's agent at Stockton: *Provided*, That any advance notice shall be sufficient if given verbally to the draw tender while he is on duty, or by telephone to the railway company's agent at Stockton before 4:00 p. m. on any day except a Sunday or national holiday.

* * * * *

[Regs. Aug. 22, 1950, 823.01-ENGWO] (28 Stat. 362; 33 U. S. C. 499)

[SEAL] EDWARD F. WITSELL,
Major General, U. S. A.,
The Adjutant General.

[F. R. Doc. 50-8317; Filed, Sept. 21, 1950; 8:50 a. m.]

TITLE 49—TRANSPORTATION

Chapter I—Interstate Commerce Commission

[S. O. 865, Amdt. 2]

PART 95—CAR SERVICE

DEMURRAGE ON FREIGHT CARS

At a session of the Interstate Commerce Commission, Division 3, held at its office in Washington, D. C., on the 19th day of September A. D. 1950.

Upon further consideration of Service Order No. 865 (15 F. R. 6197), and good cause appearing therefor: It is ordered, that:

Section 95.865 *Demurrage on freight cars*, of Service Order No. 865 be, and it is hereby further amended by substituting the following paragraph (c) for paragraph (c) thereof:

(c) *Application.* (1) The provisions of this order, subject to the following exceptions, shall apply to intrastate and interstate traffic as well as foreign traffic, including commerce with insular possessions and the territories of Alaska and Hawaii.

Exceptions. Import, Export, coastwise (including Great Lakes) or intercoastal bulk freight (including vessel fuel coal and coke) or explosives during the period such bulk freight or explosive is held in cars at ports for transfer to vessels is not subject to this order. Bulk freight means any carload freight consisting of any non-liquid, non-gaseous commodity shipped loose or in mass and which in the unloading thereof is ordinarily shoveled, scooped, forked, or mechanically conveyed, or which is not in containers or in units of such size as to permit piece by piece unloading.

Effective date. This amendment shall become effective at 7:00 a. m., September 20, 1950.

It is further ordered, that a copy of this order and direction be served upon the State railroad regulatory bodies of each State, and upon the Association of American Railroads, Car Service Division, as agent of the railroads subscribing to the car service and per diem agreement under the terms of that agreement; and that notice of this order be given to the general public by depositing a copy in the office of the Secretary of the Commission at Washington, D. C., and by filing it with the Director, Division of the Federal Register.

(Sec. 12, 24 Stat. 383, as amended; 49 U. S. C. 12. Interprets or applies sec. 1, 24 Stat. 379, as amended; 49 U. S. C. 1)

By the Commission, Division 3.

[SEAL] W. P. BARTEL,
Secretary.

[F. R. Doc. 50-8323; Filed, Sept. 21, 1950; 8:51 a. m.]

PROPOSED RULE MAKING

DEPARTMENT OF AGRICULTURE

Production and Marketing Administration

[7 CFR, Part 984]

HANDLING OF WALNUTS GROWN IN CALIFORNIA, OREGON, AND WASHINGTON

BUDGET OF EXPENSES OF THE WALNUT CONTROL BOARD AND CHANGE IN THE RATE OF ASSESSMENT FOR THE 1950–51 MARKETING YEAR

Notice is hereby given, pursuant to the provisions of section 4 of the Administrative Procedure Act (Pub. Law 404, 79th Congress, 60 Stat. 237), approved June 11, 1946, that the administrative rule herein set forth is proposed in accordance with the provisions of Marketing Agreement No. 105 and Order No. 84 regulating the handling of walnuts grown in California, Oregon, and Washington.

Prior to the final issuance of such administrative rule, consideration will be given to any data, views, or arguments pertaining thereto which are submitted in writing to the Director, Fruit and Vegetable Branch, Production and Marketing Administration, United States Department of Agriculture; Washington 25, D. C., and which are received not later than the close of business on the 10th day after the date of the publication of this notice in the FEDERAL REGISTER, except that, if said 10th day after publication should fall on a holiday or Sunday, such submission may be received by the Director not later than the close of business on the next following workday.

The Walnut Control Board, established pursuant to the provisions of the aforesaid marketing agreement and order, has transmitted to the Secretary of Agriculture its recommendations relating to the proposed budget and change in the rate of assessment.

The material submitted by the board and other information available to the Secretary was considered and it is proposed to accept the board's recommendations.

Therefore, such proposed administrative rule is as follows:

§ 984.302 *Budget of expenses of the Walnut Control Board for the marketing year beginning August 1, 1950.* (a) Expenses in the amount of $82,800.00 are reasonable and are likely to be incurred by the Walnut Control Board for its maintenance and functioning, and for such other purposes as the Secretary may, pursuant to the provisions of the marketing agreement and order, determine to be appropriate, for the marketing year beginning August 1, 1950.

(b) Change in the rate of assessment for the marketing year beginning August 1, 1950: Each handler shall pay to the Control Board on demand by the Control Board, from time to time, the sum of 0.12 cent for each pound of merchantable walnuts handled or certified for handling by him during the marketing year beginning August 1, 1950.

Done at Washington, D. C., this 18th day of September 1950.

[SEAL] FLOYD F. HEDLUND,
Acting Director,
Fruit and Vegetable Branch.

[F. R. Doc. 50-8307; Filed, Sept. 21, 1950; 8:48 a. m.]

CIVIL AERONAUTICS BOARD

[14 CFR, Part 40]

AIR CARRIER OPERATING CERTIFICATION

ROUTE REQUIREMENTS; VISUAL CONTACT NIGHT OPERATION

Notice is hereby given that adoption of the following rules is contemplated.

All interested persons who desire to submit written data, views, or arguments for consideration by the Administrator of Civil Aeronautics in connection with the proposed rules shall send them to the Civil Aeronautics Administration, Office of Aviation Safety, Washington 25, D. C., within 15 days after publication of this notice in the FEDERAL REGISTER.

§ 40.36-1 *Route requirements; visual contact night operation. (CAA rules which apply to § 40.36).* It has been determined that safe air carrier operation at night can be conducted under visual flight rules, when VFR conditions exist over the entire route utilizing adequate radio navigational aids in lieu of the airway beacons and obstruction lights specified in CAR 40.36 where (a) sufficient radio aids coverage will provide safe aircraft navigation by that means, (b) the radio equipment in the aircraft and the ground navigation aids are in normal operation during the time the flights are being conducted, and (c) airport beacon, obstruction lights, runway (contact) lights, and such other lighting facilities deemed necessary by the Administrator are in operation at all terminals and intermediate stops.

(Sec. 205, 52 Stat. 984, as amended; 49 U. S. C. 425. Interpret or apply sec. 601, 52 Stat. 1007, as amended; 49 U. S. C. 551)

[SEAL] DONALD W. NYROP,
Acting Administrator of Civil Aeronautics.

[F. R. Doc. 50-8287; Filed, Sept. 21, 1950; 8:45 a. m.]

FEDERAL COMMUNICATIONS COMMISSION

[47 CFR, Parts 7 and 8]

[Docket No. 9797]

COASTAL AND MARINE RELAY SERVICES, AND SHIP SERVICES

NOTICE OF PROPOSED RULE MAKING

1. Notice is hereby given of proposed rule making in the above-entitled matter.

2. Proposed revisions of Parts 7 and 8 of the Commission's rules are set forth below. The proposed rules represent extensive changes designed to make Parts 7 and 8 appropriate not only to the current but also the anticipated circumstances of the maritime services, including revisions reflecting provisions of applicable international treaties and agreements now in force or which, it is believed, will come into force within the foreseeable future. The proposed rules also provide for the regularization of certain presently experimental uses of maritime mobile frequencies. However, pending the accrual of further experience, other such uses are continued in a developmental status.

3. These proposed rules are issued under authority of Titles II and III of the Communications Act of 1934, as amended, and pursuant to the Radio Regulations in effect annexed to the International Telecommunication Convention (Madrid, 1932) and (Atlantic City, 1947) and the International Convention for the Safety of Life at Sea (London, 1929).

4. Any interested party who is of the opinion that the proposed rules should not be adopted, or should not be adopted in the form set forth herein may file with the Commission on or before November 15, 1950, a written statement or brief setting forth his comments. At the same time, any person who favors the rules as set forth may file a statement in support thereof. The Commission will consider all comments, briefs and statements presented before taking final action in the matter. If any comments are received which appear to warrant the Commission in holding an oral argument before final action is taken, notice of the time and place of such oral argument will be given such interested parties.

5. In accordance with the provisions of § 1.764 of the Commission's Rules, an original and 14 copies of all statements, briefs or comments filed shall be furnished the Commission.

Adopted: September 13, 1950.

FEDERAL COMMUNICATIONS COMMISSION,
[SEAL] T. J. SLOWIE,
Secretary.

PART 7—STATIONS ON LAND IN THE MARITIME SERVICES

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§ 7.1 *Basis and purpose.* (a) The basis for the rules in this part is the Communications Act of 1934, as amended, and applicable treaties and agreements to which the United States is a party. The rules in this part are issued pursuant to the authority contained in the Communications Act of 1934, as amended, which vests authority in the Federal Communications Commission to regulate common carriers of interstate and foreign communications to regulate radio transmissions, and to issue licenses for radio stations.

(b) The purpose of the rules and regulations in this part is to prescribe the manner in which portions of the radio spectrum may be made available for the use of radio for maritime operations which require radio transmitting facilities on land. For the purpose of this part, the following definitions shall be applicable.[1]

SUBPART A—DEFINITION OF TERMS

§ 7.2 *General*—(a) *Commission.* The term "Commission" means the Federal Communications Commission.[2]

(b) *Statutes and international agreements.* (1) Communication Act: The Communications Act of 1934, as amended.

(2) International Radio Regulations: The Radio Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947); and the General Radio Regulations (Revision of Cairo, 1938) annexed to the International Telecommunication Convention (Madrid, 1932).

(c) *Telecommunication.* Any transmission, emission, or reception of signs, signals, writing, images, and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.

(d) *Radiocommunication.* Any telecommunication by means of Hertzian waves.

(e) *Public correspondence.* Any telecommunication which the offices and stations, by reason of their being at the disposal of the public, must accept for transmission.

(f) *Station.* A separate radio transmitter, or a combination of radio transmitter(s) and radio receiver(s), including the accessory equipment required for carrying on a radiocommunication service.

(g) *Station authorization.* Any valid construction permit, station license, or special temporary authority for use of a station, issued by the Commission.

(h) *Person.* Includes an individual, partnership, association, joint stock company, trust, or corporation.

(i) *Permittee.* A person who holds a valid station construction permit.

(j) *Station licensee.* A person who holds a valid station license or special temporary authorization.

(k) *Operator licensee.* A person who holds a valid license or valid permit for the actual operation of a licensed station.

(l) *Hours of service.* The period of time during each calendar day when a station is available, in conformity with the terms of the station authorization, for the rendition of its normal service.

(m) *Day.* Where the word "day" is applied to the use of a specific frequency assignment or to a specific authorized transmitter-power, such use of the word "day" shall be construed to mean transmission-power during that period of time included between one hour after local sunrise and one hour before local sunset.

(n) *Landing area.* Any locality, either of land or water, including airdromes and intermediate landing fields, which is used, or intended to be used, for the landing and take-off of aircraft, whether or not facilities are provided for the shelter, servicing, or repair of aircraft, or for receiving or discharging passengers or cargo. (See Title I, section 1 (22) of the Civil Aeronautics Act of 1938, as amended.)

(o) *Radio district.* A prescribed geographic area within the United States which, for the purpose of official inspection of radio stations in behalf of the Commission, is under the jurisdiction of a Commission engineer-in-charge whose official address and specific area of inspection associated therewith are designated by Appendix I to this part.[3]

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[1] For other definitions, refer to Part 2, Rules Governing Frequency Allocations and Treaty Matters; General Rules and Regulations; Part 8, Rules Governing Stations on Board Ships in the Maritime Services; and Part 14, Rules Governing Radio Stations in Alaska—Other than Amateur and Broadcast.

[2] The address of the Commission's principal office is "Federal Communications Commission, Washington 25, D. C."

(p) *Commercial transport vessel.* Any ship or vessel which (1) is used in commerce for transporting passengers or goods to or from any harbor(s) or port(s), or between terminals within a particular harbor or port area, or (2) is used primarily in connection with the construction, modification of construction, maintenance, repair, loading, unloading, movement, or piloting of any vessels of category (1).

(q) *Mile.* As used in this part, the term "mile" means a statute mile or 5280 feet.

§ 7.3 *Maritime mobile service*—(a) *Mobile service.* A service of radiocommunication between mobile and land stations, or between mobile stations.

(b) *Maritime mobile service.* A mobile service between ship stations and coast stations, or between ship stations.[4]

(c) *Mobile station.* A station in a mobile service intended to be used while in motion, or during halts at unspecified points.

(d) *Land station.* A station in the mobile service not intended for operation while in motion.

(e) *Coast station.* A land station in the maritime mobile service carrying on a service with ship stations.[4]

(f) *Public coast station.* A coast station open to public correspondence.

(g) *Limited coast station.* A coast station, not open to public correspondence, which serves the operational and business needs of ships.

(h) *Class I coast station.* A coast station (public or limited) licensed to provide a maritime mobile service, primarily over maximum attainable distances, to ships at sea, whose frequency assignment for this purpose includes appropriate frequencies below 150 kc or between 5,000 kc and 25,000 kc.

(i) *Class II coast station.* A coast station (public or limited) licensed to provide a maritime mobile service, primarily of a regional character, whose frequency assignment does not include any frequency below 150 kc, or between 5,000 kc and 25,000 kc except on a secondary basis under specified conditions intended to minimize the possibility of interference to other stations having priority on these frequencies.

(j) *Class III coast station.* A coast station (public or limited) licensed to provide a maritime mobile service, primarily of a local character, whose frequency assignment does not include any frequency below 25,000 kc.

(k) *Operational designator.* The letter "A", "B", or "F", appended to the term "Class I", "Class II", or "Class III", as these terms are defined in paragraphs (h), (i), and (j) of this section, designates that the coast station is licensed to render its normal service by means of (A) telegraphy, (B) telephony, or (F) facsimile.[5]

(l) *Marine-utility station.* A station in the maritime mobile service, readily portable for use as a limited coast station at unspecified points ashore within a designated local area, or for use as a limited ship station on mobile vessels within a designated local area.

§ 7.4 *Maritime Radiolocation Service*—(a) *Radiolocation.* Determination of a position or direction by means of the constant velocity or rectilinear propagation properties of Hertzian waves.

(b) *Radiolocation service.* A service involving the use of radiolocation.

(c) *Maritime radiolocation service.* A radiolocation service intended for the benefit of ships.

(d) *Radiolocation station.* A station in the radiolocation service.

(e) *Radiolocation land station.* A station in the radiolocation service not intended for operation while in motion.

(f) *Shore radiolocation station.* A radiolocation land station performing a maritime radiolocation service.

(g) *Shore radiolocation-training station.* A shore radiolocation station used solely to train and qualify persons in the effective use of maritime radiolocation.

(h) *Shore radiolocation-test station.* A shore radiolocation station used solely for testing maritime radiolocation apparatus incident to its manufacture, installation, repair, servicing and/or maintenance.

(i) *Radionavigation.* Radiolocation intended solely for the determination of position or direction or for obstruction warning, in navigation.

(j) *Radionavigation service.* A radiolocation service involving the use of radionavigation.

(k) *Maritime radionavigation service.* A radionavigation service intended for the benefit of ships.

(l) *Radionavigation station.* A station in the radionavigation service.

(m) *Radionavigation land station.* A station in the radionavigation service not intended for operation while in motion.

(n) *Shore radionavigation station.* A radionavigation land station performing a maritime radionavigation service.

(o) *Radar.* A radiolocation system where transmission and reception are carried out at the same location, and which utilizes the reflecting or retransmitting properties of objects in order to determine their position.

(p) *Primary radar.* Radar using reflection only.

(q) *Secondary radar.* Radar using automatic retransmission on the same or on a different radio frequency.

(r) *Shore-radar station.* A shore radionavigation station utilizing radar for the purpose of detecting above-water objects (primarily ships) with a determination of their direction and distance from the station.

(s) *Radio direction-finding.* Radiolocation in which only the direction of a station is determined by means of its emission.

(t) *Radio direction-finding station.* A radiolocation station intended to determine only the direction of other stations by means of transmissions from the latter.

(u) *Marine radiobeacon station.* A radionavigation land station, the emissions of which are intended to enable a ship station to determine its bearing or its direction in relation to the marine radiobeacon station.

§ 7.5 *Maritime fixed services*—(a) *Fixed service.* A service of radiocommunication between specified fixed points.

(b) *Fixed station.* A station in the fixed service.

(c) *Operational fixed station.* A fixed station, not open to public correspondence, operated by and for the sole use of agencies operating their own radiocommunication facilities in the Public Safety, Industrial, Land Transportation, Marine, or Aviation Services.

(d) *Marine fixed station.* A fixed station, used primarily for safety communication[6] which is established at a designated location in a water area of, or contiguous to, the United States, and isolated from the mainland by water or marsh.

(e) *Marine control station.* An operational fixed station used to control the emissions or operation of a coast station at a separate location.

(f) *Marine repeater station.* An operational fixed station used to retransmit, to a point of destination or to a message routing center, radiocommunications received at a coast station from ship or aircraft stations in the maritime mobile service.

(g) *Marine relay station.* An operational fixed station used for communication between coast stations or between a coast station and an associated remote control point, which is intended to expedite the movement of message traffic to or from mobile stations in the maritime mobile service.

(h) *Marine receiver-test station.* A fixed station used to simulate transmission from a ship station to a coast station for the purpose of periodically testing the normal receiving installation of a licensed coast station to determine that such receiving installation is in good working condition.

§ 7.6 *Developmental maritime stations on land*—(a) *Developmental land station.* A land station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the non-government mobile service which has been specifically allocated the authorized frequency (or frequencies) of the developmental land station.

(b) *Developmental radiolocation station.* A radiolocation station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the non-government radiolocation service (including the non-government radionavigation service) which has been specifically allocated the authorized frequency (or frequencies) of the developmental radiolocation station.

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[3] This will be identical with appendix attached to Part 12 (47 CFR Part 12).

[4] Aircraft stations, when transmitting on designated frequencies allocated to the maritime mobile service, may communicate in this service with ship stations and coast stations.

[5] Operational designators are used individually or in combinations of two or more, as may be appropriate to a particular coast station. Examples of coast station classification for regulatory and administrative purposes in accordance with these rules: Public I-A, Public III-B, Limited II-A, Limited III-BF, Public II-AB, etc.

[6] See § 7.7 (a) defining "safety communication".

(c) *Developmental fixed station.* A fixed station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the non-government fixed service which has been specifically allocated the authorized frequency (or frequencies) of the developmental fixed station.

(d) *Specific classification.* The specific classes of developmental stations on land licensed in the maritime mobile service, the maritime radiolocation service (including maritime radionavigation service), and the maritime fixed services, are the same as the classes defined in preceding sections of this Part; however, for purposes of identification, the particular class of station is followed by the parenthetical indicator "(developmental)"; for example: "Public Class III coast station (developmental)".

§ 7.7 *Operational*—(a) *Safety communication.* The transmission or reception of distress, alarm, urgent, or safety signals, or any form of radiocommunication which, if delayed in transmission or reception, may adversely affect the safety of life or property; and occasional test transmission or reception as necessary for determining whether or not the radio equipment is in good working condition for purposes of safety.

(b) *Superfluous radiocommunication.* Any transmission that is not necessary to the conduct of the service for which the station is licensed.

(c) *Harmful interference.* Any radiation or any induction which endangers the functioning of a radionavigation service or of a safety service, or obstructs or repeatedly interrupts a radio service operating in accordance with applicable laws, treaties, and regulations.

(d) *Distress signal.* (1) The distress signal is the radiotelegraph or radiotelephone signal which indicates that a ship, aircraft, or other vehicle is threatened by grave and imminent danger and requests immediate assistance.

(2) In radiotelegraphy, the international distress signal consists of the group "three dots, three dashes, three dots", transmitted as a single signal in which the dashes are emphasized so as to be distinguished clearly from the dots.

(3) In radiotelephony, the international distress signal consists of the oral enunciation of the word "MAYDAY", pronounced as the French expression "m'aider".

(e) *Alarm signal.* The international radiotelegraph signal, consisting of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second, having for its sole purpose the actuation of automatic devices giving warning by means of an alarm that a distress call or message is about to follow, or that an urgent cyclone warning is about to be sent by a coast station authorized to do so.

(f) *Urgency signal.* (1) The urgency signal is the radiotelegraph or radiotelephone signal which indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or of some person on board or within sight.

(2) In radiotelegraphy, the international urgency signal consists of three repetitions of the group "XXX", sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international urgency signal consists of three oral repetitions of the word "PAN" pronounced as the French word "panne" and sent before the call.

(g) *Safety signal.* (1) The safety signal is the radiotelegraph or radiotelephone signal which indicates that the station sending this signal is ready to transmit a message concerning the safety of navigation or giving important meteorological warnings.

(2) In radiotelegraphy, the international safety signal consists of three repetitions of the group "TTT", sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international safety signal consists of three oral repetitions of the French word "SECURITE", sent before the call.

(h) *Distress traffic.* All messages relative to the immediate assistance required by the ship, aircraft, or other vehicle in distress.

(i) *500 kilocycles silent period.* The three-minute period twice an hour beginning at x h 15 and x h 45, Greenwich mean time (GMT), during which the International Radio Regulations require that all transmissions (except for certain emissions designated in those Regulations) must cease on all frequencies within a designated frequency-band centered on 500 kc.

(j) *Watch.* The act of listening for or to sound produced by a telephone receiver when the electric wave energy at audio frequency supplied to the telephone receiver—

(1) Results from simultaneous interception and detection of Hertzian waves of a designated radio frequency or frequencies, and

(2) Is substantially equivalent in frequency to the audio frequency or frequencies generated by detection of the intercepted Hertzian waves.

(k) *Calling.* Transmission from a station solely to secure the attention of another station, or other stations, for a particular purpose.

(l) *Working.* Radiocommunication carried on, for a purpose other than calling, by any station or stations using telegraphy, telephone, or facsimile.

(m) *Control point.* An operating position associated with a particular station or stations which is—

(1) Under the control and supervision of the station licensee or his authorized agent; and

(2) A place at which the required monitoring and control facilities are available; and

(3) A place at which a duly licensed operator (or other person if the requirement for a licensed operator is waived by the Commission) responsible for the operation of the transmitter(s) is stationed.

(n) *Dispatch point.* A place from which radiocommunication may be transmitted under supervision of a responsible operator at a control point.

§ 7.8 *Technical*—(a) *Radio frequency.* Any frequency between 10 kilocycles per second and 3,000,000 megacycles per second.

(b) *Audio frequency.* A frequency corresponding to the frequency of a normally audible sound wave, usually between 20 and 15,000 cycles per second.

(c) *Hertzian waves.* Electromagnetic waves of frequencies between 10 kc and 3,000,000 Mc.

(d) *Emission.* Any radiation of energy by means of Hertzian waves.

(e) *Spurious emission.* Any emission from a station at a frequency or frequencies outside an authorized frequency-band.

(f) *Telegraphy.* A system of telecommunication for the transmission of written matter by the use of a signal code.

(g) *Telephony.* A system of telecommunication set up for the transmission of speech or, in some cases, other sounds.

(h) *Facsimile.* A system of telecommunication for the transmission of fixed images with a view to their reception in a permanent form.

(i) *Selective-calling.* A means of calling in which signals are transmitted in accordance with a prearranged code for the purpose of operating a particular automatic attention device in use at the selected station whose attention is sought.

(j) *Crystal oscillator.* A generator of alternating-current energy, the frequency of which is determined by the mechanical properties of a piezoelectric crystal.

(k) *Carrier frequency.* The frequency of the carrier.[1]

(l) *Authorized carrier frequency.* A specific carrier frequency authorized for use by a station, from which the actual carrier frequency is permitted to deviate, solely because of frequency instability, by an amount not to exceed the frequency tolerance.

(m) *Frequency tolerance.* The extent to which a carrier frequency (or when a carrier is not present, a frequency coinciding with the center of an emission-bandwidth) is permitted, by applicable regulations or by the terms of a station authorization, to depart, solely because of frequency instability, from the authorized carrier frequency (or, when a carrier is not present, from the assigned frequency).

(n) *Frequency-band.* A continuous range of frequencies extending between two designated limiting frequencies.

(o) *Bandwidth.* The number of cycles or kilocycles per second expressing the difference between the limiting frequencies of a frequency band.

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[1] For the definition of "carrier", see § 2.1, in Part 2 of the Commission's rules.

(p) *Radio-channel.* A frequency-band, sufficient in width to permit its use for radiocommunication, comprised of the emission-band-width, the interference guard bands, and the frequency tolerance.

(q) *Emission-bandwidth.* The bandwidth effectively occupied by the emission of a radio-channel (the band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power).[8]

(r) *Interference guard bands.* The two frequency-bands additional to and on either side of, the authorized frequency-band, which may be provided to minimize the possibility of interference between different radio-channels.

(s) *Authorized emission-bandwidth.* A specific emission-bandwidth authorized for use by a station.

(t) *Authorized frequency-band.* A frequency band authorized for use by a station.

(u) *Assigned frequency.* The frequency coinciding with the center of the frequency-band in which the station is authorized to work; this frequency does not necessarily correspond to any frequency in an emission.[9]

(v) *Frequency assignment.* The specific frequency or frequencies authorized for the emission(s) of a particular station; expressed for each radio-channel by—

(1) The authorized carrier frequency, the frequency tolerance, and the authorized emission-bandwidth

(2) The authorized emission-bandwidth in reference to a specific assigned frequency (when a carrier does not exist), or

(3) The authorized frequency-band (when a carrier does not exist).

(w) *Modulation.* The process of producing a wave, some characteristic of which varies as a function of the instantaneous value of another wave called the modulated wave.

(x) *Modulation factor.* (1) In an amplitude-modulated wave, the ratio of half the difference between the maximum and minimum amplitudes to the average amplitude.

(2) In a frequency-modulated wave, the ratio of the actual frequency swing to the frequency swing defined as 100 percent modulation.

(y) *Percentage modulation.* The modulation factor expressed in percent.

(z) *Amplitude modulation (AM).* Modulation in which the amplitude of a wave is the characteristic subject to variation.

(aa) *Frequency modulation (FM).* Modulation in which the instantaneous frequency of a sine-wave carrier[10] is caused to depart from the carrier frequency by an amount proportional to the instantaneous value of the modulating wave.

(bb) *Frequency deviation.* In frequency modulation, the peak difference between the instantaneous frequency of the modulated wave and the carrier frequency.

(cc) *Frequency swing.* In frequency modulation, the peak difference between the maximum and the minimum values of the instantaneous frequency.

(dd) *Deviation ratio.* In frequency modulation, for a sinusoidal modulating wave, the ratio of the frequency deviation to the frequency of the modulating wave.

(ee) *Antenna (aerial).* A means for radiating or intercepting Hertzian waves.

(ff) *Artificial antenna (dummy antenna).* A device which has the equivalent impedance characteristics of an antenna and the necessary power-handling capabilities, but which does not radiate or intercept Hertzian waves.

(gg) *Last radio stage.* In an electron-tube radio transmitter, the radio-frequency oscillator or power amplifier stage which supplies all radio-frequency power to the antenna, either directly or through the medium of a transmission line.

(hh) *Plate (anode) input power.* The electrical power delivered to the plate (anode) of an electron tube by the source of supply; this power being the product of the effective anode voltage and the effective anode current.

(ii) *Antenna power.* The power supplied by a particular radio transmitter to the antenna used in connection with that transmitter, at a radio frequency or frequencies within an authorized frequency-band.

(jj) *Radiated power.* Energy, in the form of Hertzian waves, radiated from an antenna.

(kk) *Authorized transmitter-power.* The power of a particular transmitter as designated in the respective station license or construction permit or in lieu thereof, the power designated in the applicable Commission rule(s) or regulation(s). Unless specifically expressed otherwise, this power is the total plate input power to all electron tubes of the last radio stage of the transmitter which are used to supply radio-frequency power to the antenna measured as prescribed in § 7.134.

(ll) *Telephone receivers.* Whenever use of the following terms occurs in reference to "watch" as defined in paragraph (j) of § 7.7 such use of these terms shall be construed as follows:

(1) *Telephone receiver.* Any instrument used to convert energy consisting of electric waves at audio frequency into energy consisting of substantially equivalent sound waves.

(2) *Hand receiver.* A telephone receiver capable of being held to the ear by the hand and normally used in that manner.

(3) *Head receiver.* A telephone receiver capable of being held to the ear by an attached headband and normally used in that manner.

(4) *Loudspeaker.* A telephone receiver capable of effectively radiating acoustic power for reception by ear at a distance and normally used for that purpose.

SUBPART B—APPLICATIONS[1]

§ 7.21 *Authorization required for operation and construction of station.* (a) Any radio station required by the Communications Act to be licensed shall not be operated in the maritime mobile service, in the maritime radiolocation service, or in any maritime fixed service except under and in accordance with a valid station authorization granted by the Commission.[2] Further, the operation of such apparatus shall be conducted in conformity with the provisions of statute, international treaty or agreement, and the rules of the Commission relative to the licensing of operators.

(b) No license shall be issued by the Commission for the operation of any station subject to this part, unless a permit for its construction has first been granted by the Commission upon written application therefor.

§ 7.22 *Administrative classification of stations.* (a) Stations in the maritime mobile service subject to this part are licensed according to the class of station as designated below:

(1) Public class I coast stations.
(2) Public class II coast stations.
(3) Public class III coast stations.
(4) Limited class I coast stations.
(5) Limited class II coast stations.
(6) Limited class III coast stations.
(7) Marine utility stations.

(b) Stations in the maritime radiolocation service subject to this part (other than those exclusively in the maritime radionavigation service) are licensed according to the class of station as designated below:

(1) Shore radiolocation stations.
(2) Shore radiolocation training stations.
(3) Shore radiolocation test stations.

(c) Stations in the maritime radionavigation service subject to this part are licensed according to the class of station as designated below.

(1) Shore radionavigation stations.
(2) Shore radar stations.

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[8] This definition coincides with the definition of "Bandwidth Occupied by an Emission," which appears as paragraph 58 of the International Radio Regulations of Atlantic City, 1947. The emission-bandwidth is dependent upon the class of emission and the speed of signalling.

[9] This definition coincides with the definition of "Frequency Assigned to a Station" which appears as paragraph 57 of the International Radio Regulations of Atlantic City, 1947.

[10] For the definition of "carrier", see § 2.1 in Part 2 of the Commission's rules.

[1] For additional information concerning applications and for information concerning procedure relative to hearings, oral arguments, petitions, etc., refer to Part 1 of the Commission's rules relating to practice and procedure.

[2] The Commission has exempted certain low power radio devices from its general licensing requirements. The extent of this exemption and related matters are set forth in Part 15, rules governing restricted radiation Devices. Licensing procedures and exceptions applicable to radio apparatus used for medical purposes, industrial heating, and other miscellaneous purposes not involving radiocommunication are set forth in Part 18, rules and regulations relating to industrial, scientific and medical service.

(d) Stations in the fixed service subject to this part are licensed according to the class of station as designated below:

(1) Marine fixed stations.
(2) Marine control stations.
(3) Marine repeater stations.
(4) Marine relay stations.
(5) Marine receiver-test stations.

§ 7.23 *Statutory eligibility for station license.* A station license shall not be granted to or held by:

(a) Any alien or the representative of any alien;

(b) Any foreign government or the representative thereof;

(c) Any corporation organized under the laws of any foreign government;

(d) Any corporation of which any officer or director is an alien;

(e) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country;

(f) Any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, if the Commission finds that the public interest will be served by the refusal or revocation of such license; or

(g) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representatives thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

§ 7.24 *Application precedent to authorization.* Except as otherwise provided in §§ 7.26 and 7.41, no authorization will be granted for use or operation of any radio station on land in any service governed by this part, nor for any change in station control, facilities, services, equipment or antenna, unless formal written application therefor in proper form[2] first is filed with the Commission. Except as otherwise permitted by this part, a separate application shall be filed in respect to each station and service subject to this part. Each application for radio station authorization, and all correspondence relating thereto, shall be submitted in duplicate (unless otherwise specified in a particular case or with respect to a particular form) to the Secretary of the Commission at Washington 25, D. C. Except as otherwise provided in §§ 7.32, 7.36 and 7.41, an application should be filed at least sixty days prior to the earliest date on which it is desired that the requested authorization be granted by the Commission in order that action thereon may be taken by that date. The application shall be specific and complete with regard to the information required in the application form, or otherwise specifically requested by the Commission.

§ 7.25 *Signature on applications.* One copy of each application for an authorization shall be signed under oath or affirmation by the applicant if the applicant be an individual, or any one of the partners if an applicant be a partnership, or by an officer if the applicant be a corporation, or by a member who is an officer if the applicant be an unincorporated association: *Provided, however,* That applications may be signed by the attorney for an applicant (a) in case of physical disability of the applicant, or (b) his absence from the continental United States. If application is made by a person other than the applicant, such person must set forth in the verification the grounds of his belief as to all matters not stated upon his knowledge and the reason why the application is not made by the applicant. Applications filed on behalf of eligible governmental entities, such as states and territories of the United States and political subdivisions thereof, the District of Columbia, and units of local government including incorporated municipalities, shall be signed by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction. When more than one copy of an application is required to be filed with the Commission, only the original need be signed or verified; copies may be conformed.

§ 7.26 *Informal applications.* An application not submitted on a standard form prescribed by the Commission is an informal application. Each informal application shall be submitted in duplicate, normally in letter form, and except as provided in § 7.41, the original copy shall be subscribed and verified as provided in § 7.25. Each application shall be clear and complete within itself as to the facts presented and the action desired.

§ 7.27 *Defective applications.* (a) An application which is defective with respect to completeness of answers to required questions, execution, or other matters of a purely formal character, will not be received for filing by the Commission, unless the Commission shall otherwise direct, and will be returned to the applicant with a brief statement as to the defect.

(b) An application which is not made in accordance with the Commission's rules, regulations, or other requirements, will be considered defective unless accompanied either (1) by a petition to amend the rule or regulation with which the application is in conflict, or (2) by a request of the applicant for waiver of, or exception to, any rule, regulation or requirement with which the application is in conflict. Such request shall show the nature of the waiver or exception desired and set forth the reasons in support thereof.

(c) If an applicant is requested by the Commission to file any documents or information not included in the prescribed application form, a failure to comply with such request will constitute a defect in the application.

§ 7.28 *Amendments of applications.* (a) Any application may be amended as a matter of right prior to the designation of such application for hearing by filing the appropriate number of copies of the amendments duly executed. Requests to amend an application after it has been designated for hearing will be considered only upon written petition properly served upon the parties of record, and will be granted only for good cause shown. A petition which requests either a change in frequency or power must be accompanied by the affidavit of a person with knowledge of facts as to whether or not consideration has been promised to or received by petitioner, directly or indirectly, in connection with the filing of such petition for amendment. If such consideration has been promised or received, the affidavit shall set forth in full detail all the relevant facts. A petition to amend an application will not be accepted (other than an amendment which is merely pro forma in nature, such as the removal of a named person because of death) if it is filed after public notice has been given of the issuance of a proposed decision with respect to such application, or of a recommended or an initial decision, as the case may be, where no proposed decision is to be issued.

(b) When leave to amend has been granted after an application has been designated for hearing, the application will not be removed from the hearing docket unless the Motions Commissioner shall determine that the proposed amendment substantially affects the issues upon which the application has been designated for hearing and orders that the application shall be removed from the hearing docket. An amended application which has been removed from the hearing docket will be reexamined by the Commission and, when necessary, will be redesignated for hearing at a subsequent time.

§ 7.29 *Dismissal of applications.* Any application may be dismissed without prejudice as a matter of right prior to the designation of such application for hearing. Requests to dismiss an application without prejudice after it has been designated for hearing will be considered only upon written petition properly served upon all parties of record. Such petition must be accompanied by the affidavit of a person with knowledge of the facts as to whether or not consideration has been promised to or received by petitioner, directly or indirectly, in connection with the filing of such petition for dismissal of the application. Such petition to dismiss an application without prejudice will be granted only for good cause shown, but will, in no event, be granted after public notice has been given by the Commission of the issuance of a proposed decision proposing to deny the application.

§ 7.30 *Partial grant of application.* Whenever the Commission, without a hearing, grants an application in part, or with any privileges, terms, or conditions other than those requested, the action of the Commission shall be considered as a grant of such application unless the applicant shall, within 20 days from the date on which public announcement of such grant is made, or from its effective date if a later date is specified, file with the Commission a written protest, rejecting the grant as made. Upon receipt of such protest, the Commission will vacate its original action upon the application and, if necessary, set the application for hearing in the same manner as other applications are set for hearing.

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[2] Standard forms are prescribed herein for use in connection with the majority of applications submitted for Commission consideration. These forms may be obtained without cost from the Commission at Washington 25, D. C., or from any of its engineering field offices.

§ 7.31 *Establishment of station.* (a) Application for permit to construct a station subject to this Part[4] shall be submitted on FCC Form 401.[5] When actual construction is not involved, the term "construct" as used herein, is construed to mean "installation" or any action of an equivalent nature involved in preparing the station for actual operation prior to the issuance of a station license.

(b) FCC Form 401a, "Description of Proposed Antenna Structure", shall be submitted in quadruplicate with duplicate set of FCC Form 401 in each instance when:

(1) The antenna and supporting structures proposed to be erected will exceed an over-all height of 150 feet above ground level; or

(2) The antenna is to be located within 3 miles of a landing area and will exceed an over-all height of one foot above ground for each 100 feet of distance, or fraction thereof, from the nearest boundary of the landing area.

(c) There shall be attached to each copy of FCC Form 401a a sketch showing the antenna and supporting structure as well as a map showing the location of the antenna, landing areas in the vicinity thereof, and all structures that may affect the marking of the antenna or supporting structure.

(d) The location of the control point shall be specified in the application for construction permit. The location of the control point may be the same as that of the transmitting equipment or it may be a separate location. More than one control point for the same transmitting equipment is permissible if specified in the application and authorized by the Commission.[6]

(e) Each application for construction permit shall include such supplementary information as is prescribed in other applicable sections of this part, with respect to the particular class of station for which a station authorization is requested.

§ 7.32 *Changes prior to completion of station.* (a) When, during the term of a construction permit, any change is to be made in respect to the station which would result in a deviation from the terms of the permit, application for modification of such permit shall be filed on FCC Form 401.

(b) FCC Form 401a, in quadruplicate, shall also be used whenever any change is to be made in the antenna structures if such structures are, or will be, as the result of such change, within 3 miles of a landing area; or whenever the over-all height of the antenna structures exceeds, or as a result of such change will exceed, 150 feet above ground level. In such cases, there shall be attached to Form 401a a sketch and a map as prescribed in paragraph (c) of § 7.31.

(c) FCC Form 701 shall be used whenever it is necessary to request an extension of the time limit specified on a valid construction permit. Such application shall be filed at least 30 days prior to the expiration date of the permit if the facts supporting such application for extension are known to the applicant in time to allow such filing. In other cases, such application will be accepted upon a showing satisfactory to the Commission of the reason for filing within less than 30 days prior to the expiration date. Such application shall contain specific and detailed information showing that failure to complete construction within the authorized period is the result of causes beyond the control of the permittee, or that the applicant has been diligent in his efforts to complete the construction of the proposed station.

§ 7.33 *Applications concerning marine-utility stations.* (a) A permit for construction of a marine-utility station is not required when such station is to be used and operated solely on board mobile vessels. In such circumstances, the marine-utility station is subject to the provisions of Part 8 of the Commission's rules and application for station license may be filed in accordance with the applicable sections of that part.

(b) Whenever a marine-utility station is to be used and operated at any location on land (whether or not it is to be used and operated additionally on board mobile vessels) such station is subject to the applicable provisions of this part[7] and an application for construction permit to establish such station shall be filed with the Commission.

§ 7.34 *Temporary and permanent station locations.* (a) Whenever a station (other than a marine-utility station) is to be used and operated, on and after the effective date of the station license, at any single location for a period of less than six months, the station location is construed to be temporary. An application for construction permit relative to such station shall specify the station location as temporary, and shall designate each temporary location at which the station is to be used and operated or shall specify the general geographic area within which the use and operation of the station will be confined.[8]

(b) Whenever a station (other than a marine-utility station) is to be used and operated, on and after the effective date of the station license, at a single location for six months or more, the station location is construed to be permanent and shall be designated accurately in the application for construction permit.[9]

§ 7.35 *Application for station license.* Upon completion[10] of construction in accordance with the terms of the construction permit (as modified if a modified permit has been issued), an application for station license shall be submitted on FCC Form 403.

§ 7.36 *Changes during license term.* (a) When, during the term of a station license, any change is to be made in respect to the station, or with respect to its use and operation, which would result in a deviation from the terms of the license, an application for construction permit or modification of license, as the case may require, shall be filed as prescribed in paragraphs (b), (c), and (d) of this section.

(b) Authority for any physical change in the construction of the transmitting equipment or installation, or for the addition of radio transmitting apparatus, or for any change in station location, or for any change in antenna structures of the nature designated in paragraph (b) of § 7.32, shall be requested by filing an appropriate application for construction permit on FCC Form 401. If a physical change in the antenna structure(s) is proposed, a description of any marking currently required shall be supplied as part of the necessary application. Upon completion[11] of the construction, installation, or change in station location or antenna structure(s) in accordance with the terms of the construction permit, an appropriate application for modification of station license shall be submitted on FCC Form 403.

(c) Authority for any change in the use and operation of the station, other than physical changes of the nature prescribed in paragraph (b) of this section, shall be requested by filing an appropriate application on FCC Form 403[12] for modification of station license.

(d) In accordance with § 7.24 an application for modification of a station license shall be submitted not less than 60 days prior to the date contemplated for such modification of license in order that action thereon may be taken by that date.

§ 7.37 *Renewal of license.* Application for renewal of station license shall be submitted on FCC Form 405. Unless otherwise directed by the Commisison, such application should be filed at least 60 days prior to the expiration date of the license sought to be renewed in order that action thereon may be taken by that date.

§ 7.38 *Reinstatement of license.* When the use and operation of a station has been discontinued due to the station license having expired by its own terms, and an application for renewal of such station license has not been submitted within a period of 60 days from the expiration date of such license, an applicant shall, if authority is desired to resume operation in exact accordance with the terms of the expired license, submit simultaneously applications for construction permits and licenses on FCC Forms 401 and 403, respectively.

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[4] With respect to applications for marine-utility stations, see § 7.33.

[5] This form may be obtained without cost, upon request made to the Washington 25, D. C. office of the Commission or to any of the Commission's engineering field offices.

[6] See § 7.71 in respect to authority for control points.

[7] See paragraph (b) of § 7.21; also see §§ 7.39 and 7.40.

[8] A general area may be designated in terms of a specific city, county, state, region, etc., or more than one of these designations may be specified. See also §§ 7.70 and 7.71.

[9] With respect to a subsequent change in permanent station location, see §§ 7.32 and 7.36.

[10] See § 7.64 concerning operation for test purposes upon completion of construction.

[11] See § 7.64 concerning operation for test purposes upon completion of construction.

[12] See § 7.42 if assignment of the license or a change in corporate control of the licensee is involved.

§ 7.39 *Applications filed concurrently.* (a) Applications of different category but in respect to the same station and radio service may be filed concurrently by the same applicant as prescribed herewith:

(1) Application for modification of station license and for renewal of station license. However, no renewal may be granted more than thirty days prior to the expiration of the original license.

(2) Application for construction permit and for station license or related modification of license where the complete transmitter(s) is (are) available for immediate use and operation, including all accessory apparatus required for the service to be rendered, and where no construction is involved: *Provided*, The associated antenna and supporting structures are available for immediate use and do not exceed an over-all height of 150 feet above ground level and (if located within 3 miles of a landing area) do not exceed an over-all height of one foot above ground for each 100 feet of distance, or fraction thereof, from the nearest boundary of a landing area;

(3) Application for modification of construction permit and for station license provided such application for modification of construction permit does not request authority for any additional construction, extension of time in which to complete construction, or change in construction of the station (including the height of the antenna or supporting structures), and further provided that the complete transmitter(s) and all accessory apparatus required for the service to be rendered are available for immediate use and operation in accordance with the terms of the modified permit desired.

(4) Application for modification of station license and for consent to voluntary assignment or transfer of control of station license;

(5) Application for renewal of station license and for consent to voluntary assignment or transfer of control of station license. However, no renewal may be granted more than thirty days prior to the expiration of the original license.

§ 7.40 *One application for plurality of stations.* (a) As indicated below, one application may be submitted to cover two or more stations subject to the conditions prescribed in paragraph (b) of this section, and provided the individual stations covered by each application are clearly identified therein:

(1) Applications for construction permits and for station licenses for marine-utility stations to be used and operated in the same geographic area;

(2) Application for modification of construction permits for marine-utility stations to be used and operated in the same geographic area when the modification requested is the same for all stations covered by the application;

(3) Application for modification of station licenses for any class of station subject to this part when the modification requested is the same for all stations covered by the application;

(4) Application for renewal of station licenses for any class of station subject to this part;

(5) Application for consent to assignment or control of station authorizations.

(b) The provisions of paragraph (a) of this section shall apply only when the following elements are the same in respect to all of the involved stations at the time the application is filed:

(1) Applicant;

(2) Nature of service and class of station;

(3) Legal control of the station;

(4) Expiration date of the station authorization when application is made for modification or renewal thereof.

§ 7.41 *Application for special temporary authority.* (a) Upon receipt of application therefor, the Commission may grant special temporary authorization for a period not to exceed 3 months for the installation and operation of transmitting apparatus in the maritime mobile service or the maritime radiolocation service (provided the proposed operation is not in conflict with the rules and regulations of the Commission) with a station classification in accordance with § 7.6 or § 7.22, under the following conditions:

(1) In cases which require the immediate use of existing and available radio transmitting apparatus not already authorized for the desired operation, provided the associated antenna and supporting structures (if not covered by an existing station authorization) do not exceed an over-all height of 150 feet above ground level and (if located within 3 miles of a landing area) do not exceed an over-all height of one foot above ground for each 100 feet of distance, or fraction thereof, from the nearest boundary of a landing area.

(2) In cases where an urgent need is shown for operation of an authorized station (without the addition of more radio transmitting apparatus or increase in height of antenna structures) for a limited time only, in a manner or for a period of time other than that specified in the existing station authorization;

(3) For the purpose of conducting a field survey to obtain necessary data in connection with the filing of one or more formal applications. In this case, authority shall be requested for developmental operation only, and those sections of this Part applicable to developmental stations shall govern the nature of the application.

(b) Whenever practicable, an application for special temporary authority shall be filed as a formal application on a form or forms prescribed in the applicable section(s) of this part. When necessary, however, such applications may be filed as an informal application as prescribed in § 7.26. The form(s) to be used and the procedure in filing shall be governed by the provisions of this part applicable to the type of document (construction permit, license, modification thereof, etc.) which would be requested normally in a particular case in lieu of special temporary authority.

(c) Upon receipt of written or telegraphic application therefor, the Commission, in an emergency, may grant special temporary authorization for a period not to exceed three months for the voluntary discontinuance, reduction, or impairment of the authorized service of a public coast station operated as a common carrier of communications: *Provided*, Such application shall identify the particular station and shall contain information showing the nature and estimated duration of the conditions causing the discontinuance, reduction or impairment: *Provided further*, That, within five days after the filing of such application, an additional and complete application in written form requesting the same authority shall be filed in accordance with the provisions of paragraph (h) of § 7.46. The initial written or telegraphic request for special temporary authority for emergency discontinuance, reduction, or impairment of authorized service which is filed in accordance with this subsection shall be deemed granted effective as of date of filing unless, on or before the 15th day after date of filing, the Commission shall notify the station licensee to the contrary.

(d) An application for special temporary authority (except as otherwise provided in paragraph (c) of this section) shall be filed in written form not less than ten days prior to the earliest date of proposed operation thereunder unless acceptable explanation of reason for failure to meet this time limitation is included with the application form.

(e) Each application for special temporary authority (except as provided in paragraph (c) of this section) shall contain the following information:

(1) Name and address of applicant.

(2) Official call letters of any valid station authorization already held by applicant, and the station location.

(3) Relation of applicant to the owner of any transmitting equipment for which initial authority is requested.

(4) Class of station and nature of service.[12]

(5) Station(s) or class of station with which communication will be carried on.

(6) Carrier frequency or frequencies, class of emission, and emission bandwidth to be employed,[13] if these elements are involved.

(7) Equipment to be used, specifying the manufacturer, model number, the normal plate input power to the last radio stage, and frequency tolerance that can be maintained,[14] if these elements are involved.

(8) The date(s) and time(s) of the proposed operation.

(9) Complete particulars concerning purpose, nature, and location of proposed operation.

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[12] See §§ 7.6 and 7.22.

[13] See paragraphs (k), (l) and (q) of § 7.8.

[14] See paragraphs (m), (gg), (hh) and (kk) of § 7.8.

(10) Explanation of the need for special temporary authority in lieu of normal type of authorization.

(f) Each application for special temporary authority submitted by an applicant who does not hold a valid station authorization issued by the Commission, or has not already filed formal aplication therefor, shall, in addition to the information required under paragraph (d) of this section, contain such factual statements as may be necessary for the Commission to determine whether or not the granting of the desired authorization will be in accordance with the citizenship eligibility requirements of section 310 of the Communications Act.

§ 7.42 *Application for consent to assignment or transfer of control of construction permit or station license*.—(a) *Voluntary*. Application for consent to voluntary assignment of a construction permit or license covering a station subject to this Part, or for consent to voluntary transfer of control of a corporation holding such a construction permit or license, shall be filed with the Commission on FCC Form 702, "Application for Consent to Assignment of Radio Station Construction Permit or License," or FCC Form 703, "Application for Consent to Transfer of Control of Corporation Holding Construction Permit or Station License," as the case may require, at least 60 days prior to the contemplated effective date of assignment of transfer of control.

(b) *Involuntary*. In the event of the death or legal disability of a permittee or licensee, or a member of a partnership, or a person directly or indirectly in control of a corporation, which is a permittee or licensee:

(1) The Commission shall be notified in writing promptly of the occurrence of such death or legal disability; and

(2) Within 30 days after the occurrence of such death or legal disability, application on FCC Form 702 or FCC Form 703, as the case may require, shall be filed for consent to involuntary assignment of such station permit or license or for involuntary transfer of control of such corporation to a person or entity legally qualified to succeed to the foregoing interests under the laws of the place having jurisdiction over the estate involved.

§ 7.43 *Application precedent to hearing*. Whenever the Commission regards an application for renewal of license as essential to the proper conduct of a hearing or investigation and specifically directs that the licensee file such application by a certain date, the application shall be filed within the time thus specified. If the licensee fails to file such application within the prescribed time, the hearing or investigation shall proceed as if such renewal application had been received.

§ 7.44 *Failure to prosecute applications*. An applicant not desiring to prosecute his application may request that it be dismissed without prejudice. A request of an applicant for the return of an application which has been accepted for filing will be considered as a request to dismiss the same without prejudice. Where an applicant fails to respond to official correspondence or request for additional material, the application will be dismissed without prejudice.

§ 7.45 *Inconsistent or conflicting applications*. When an applicant has an application pending or undecided, no other inconsistent or conflicting application filed by the same applicant, his successor or assignee, or on behalf of or for the benefit of said applicant, will be considered by the Commission.

§ 7.46 *Applications for voluntary discontinuance, reduction, or impairment of service at a public coast station*. (a) Applications for authority to voluntarily discontinue, reduce, or impair the authorized service of a public coast station operated as a common carrier of communication shall be submitted not less than 60 days prior to the date when such change in authorized service is contemplated by the applicant: *Provided, however*, That, in an emergency and upon a showing of good cause, the 60 day limitation requirement may be waived.

(b) Unless otherwise specified, the applicant shall furnish the Commission with an original and 14 copies of such applications, the original copy of which shall be subscribed and verified as provided in § 7.25. Such applications shall be submitted on paper not more than 8½ inches wide and not more than 14 inches long, with a left-hand margin of 1½ inches. The impression shall be on one side of the paper only and shall be double spaced, except that long quotations shall be single-spaced and indented. All papers, except charts and maps which may be offered as exhibits, shall be typewritten or prepared by mechanical processing methods, other than letter press, or printed. All copies must be clearly legible.

(c) Such applications shall include the following information:

(1) The name and address of each applicant;

(2) The name, title, and post office address of the officer to whom correspondence concerning the application is to be addressed;

(3) Nature of proposed discontinuance, reduction, or impairment;

(4) Identification of the station or stations involved and date on which applicant desires to make proposed discontinuance, reduction, or impairment effective; if for a temporary period only, indicate the approximate period for which authorization is desired;

(5) Statement of the effect upon rates to any person in the community.

(6) Description of the service involved and the service area affected including population and general character of business of the community;

(7) The nature of the service which will be available or substituted.

(8) Statement of the reasons for proposed discontinuance, reduction or impairment;

(9) Statement of the factors showing that neither present nor future public convenience and necessity would be adversely affected by the granting of the application;

(10) Description of any previous discontinuance, reduction, or impairment of service to the community affected by the application, which has been made by the applicant during the 12 months preceding filing of application, and statement of any present plans for future discontinuance, reduction or impairment of service to such community;

(11) Statement of the number of messages sent-paid and received-collect and the revenues accruing to the licensee in connection with the service proposed to be discontinued, reduced, or impaired for each of the past 6 months; and, if the volume of such traffic handled in the area has decreased during recent years, the reasons therefor.

(d) Immediately upon the filing of an application for authority to discontinue, reduce, or impair service to a community or part of a community, the applicant shall post a public notice at least twenty inches (20″) by twenty-four inches (24″), with letters of commensurate size, in a conspicuous place at the station[13] affected for at least fourteen (14) days, which notice shall be in the following form:

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(Date of first posting of notice)

Notice is hereby given that application was made on the ______ day of ____________, 19 ____ by ________________________________ Company to the Federal Communications Commission to close station ________ (or reduce the hours of service from the present hours of service ____m. to ____m. to the hours ____m. to ____m.). If the application is granted, substituted service will be available from ____m. to ____m. through station(s) ____________, located at ____________ (or give other appropriate general description of substituted service). Any member of the public desiring to protest or support the closing of this station (or the reduction of the hours of service) may communicate in writing with the Federal Communications Commission, Washington 25, D. C., on or before ____________ (fill in date which is 20 days after the date of the first posting of notice.)

(e) Immediately upon the filing of such an application, the applicant shall also cause to be published a notice not less than four (4) column inches in size containing information similar to the notice form specified in (d) above, at least once during each of two consecutive weeks, in some newspaper of general circulation in the community or part of the community affected;

(f) Immediately upon the filing of any application or informal request for authority to discontinue, reduce, or impair service, or any notice of resumption of service, the applicant shall give written notice of the filing, together with a copy of such application to the State Commission of the State in which the station is located.

(g) When the posting, publication, and notification, as required in paragraphs (d) and (e) of this section, have been completed, applicant shall certify such fact to the Commission, stating the name of the newspaper in which publication was made, the name of the Commissions notified, and the dates of posting, publication, and notification.

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[13] Provided that facilities are maintained at the station for the filing or delivery of messages to public users. When such facilities are not maintained at the station, but are maintained at a nearby public office or offices of the applicant, the notice shall be posted in each such public office.

(h) The Commission may authorize temporary or emergency discontinuance, reduction, or impairment of service upon a telegraphic request identifying the station involved and giving the reasons therefor (§ 7.41 (c)): *Provided*, That within 5 days after such telegraphic request the applicant shall file an informal statement in quintuplicate showing:

(1) The nature and estimated duration of the conditions causing the discontinuance, reduction, or impairment;

(2) The facts showing that such conditions could not reasonably have been foreseen by the carrier in sufficient time to prevent such discontinuance, reduction or impairment;

(3) A description of the service involved and the service area affected;

(4) The nature of the service which will be available or substituted;

(5) The effect upon rates to any person in the community;

(6) The efforts made and to be made by the applicant to restore the original service or establish comparable service as expeditiously as possible.

SUBPART C—STATION AUTHORIZATIONS

§ 7.61 *Construction period.* Each radio station construction permit issued by the Commission will specify the date of grant as the earliest date of commencement of construction and installation, and a maximum of eight months thereafter as the time within which construction shall be completed and the installation ready for operation, unless otherwise determined by the Commission in any particular case.

§ 7.62 *Forfeiture of construction permit.* A radio station construction permit shall be automatically forfeited if the construction authorized by such permit is not completed within the time specified therein or within such further time as the Commission may have allowed for completion, unless prevented by causes not under the control of the holder of the construction permit.[1]

§ 7.63 *Changes in licensed station.* (a) A change may be made in licensed transmitting equipment without making application to the Commission and without specific authorization from the Commission: *Provided:*

(1) The change does not result in operation inconsistent with the rules of the Commission nor with the terms of the outstanding authorization for the station involved.

(2) A description of the change is incorporated in the next application for renewal or modification of license.

(b) Prior authorization from the Commission is required[2] before the following antenna changes may be made at any station other than a marine-utility station:

(1) Any change that will increase or decrease by more than five feet the overall height of an antenna used for transmission on any frequency or frequencies above 100 Mc.

(2) Any change that will modify the power gain or radiation pattern of an antenna used for transmission on any frequency or frequencies.

(3) Any change in the antenna or in the location of an antenna which exceeds, or as a result of such change will exceed, 150 feet in height.

(4) Any change in an antenna or in location of an antenna of any height which is, or as a result of such change will be, within 3 miles of a landing area.

(5) Any change in height or location of an antenna or antenna supporting structure which is required to be marked in accordance with Federal Communications Commission or Civil Aeronautics Administration specifications.

(c) Changes, except as designated in paragraph (b) of this section, may be made in the antenna or antenna supporting structure(s) of a licensed station without specific authorization from the Commission, provided that, for stations other than marine-utility stations:

(1) The Commission at Washington, D. C., and the Commission's engineer-in-charge of the inspection district in which the station is located are notified in advance of such changes; and

(2) A description of such changes is incorporated in the next application for renewal or modification of the station license.

§ 7.64 *Equipment and service tests.* (a) Equipment and service tests of any radio transmitting facilities authorized by a construction permit issued by the Commission in respect to a station subject to this Part may be conducted as prescribed in paragraphs (b), (c) and (d) of this section: *Provided*, That necessary precautions are taken to avoid interference to the service of other authorized stations.

(b) Equipment test: Upon completion of construction or installation of radio transmitting facilities in a station in exact accordance with the terms of the related construction permit, the technical provisions of the application therefor, and the rules and regulations governing the class of station concerned, and prior to the filing of an application for license or modification of license, the permittee is authorized to test the equipment in accordance with applicable terms of the construction permit for a period not to exceed 10 days: *Provided*, That the Commission's engineer-in-charge of the radio district in which the station is located is notified two days in advance of the beginning of tests and that the permittee is not notified by the Commission to cancel, suspend, or change the date(s) for such tests.

(c) Service test: When equipment tests have been completed, and after application for station license or modification thereof has been filed with the Commission showing the transmitting equipment and associated apparatus to be in satisfactory operating condition, the permittee is authorized to conduct service tests in exact accordance with the terms of the construction permit for a period not to exceed 30 days: *Provided*, That the Commission's engineer-in-charge of the radio district in which the station is located is notified two days in advance of the beginning of such tests and that the permittee is not notified by the Commission to cancel, suspend, or change the date(s) for such tests.

(d) Limitations: The authorization for tests embodied in paragraphs (b) and (c) of this section shall not be construed as constituting a license to operate but as a necessary part of the authorized construction. Equipment and service tests shall not commence after the expiration date of the construction permit.

(e) Common carrier service tests: When new stations in common carrier services are ready in all respects to be placed in service, equipment and service tests are authorized to be conducted as outlined in paragraphs (b) and (c) of this section: *Provided*, All necessary precautions are taken to avoid interference to any other authorized station. No service may be furnished to the public during the equipment test period. Charges for service furnished during the service test period may be made, pursuant to the provisions of legally applicable tariffs.[3]

§ 7.65 *Normal license period.* (a) A license for a coast station shall be issued for a period of two years, unless otherwise specified in the license, and shall expire at 3:00 a. m., e. s. t., on the first day of February. Unless otherwise ordered, if an application for a new coast station license is granted to become effective three months or less before the normal expiration date of the term of this class of license, the license shall be issued for the unexpired period of the current license term and for the full succeeding term. If granted to become effective more than three months before the expiration date of the current license term, the new license shall be issued for the unexpired period of the current license term only.

(b) A license for any class of station subject to this part, other than a coast station or a developmental station, shall be issued for a period of one year, unless otherwise stated in the license, and shall expire at 3:00 a. m., e. s. t., on the first day of February. Unless otherwise ordered, if an application for a new station license is granted to become effective three months or less before the normal expiration date of the term of this class of license, the new license shall be issued for the unexpired period of the current license term and for the full succeeding term. If granted to become effective more than three months before the expiration of the current license term, the license shall be issued for the unexpired period of the current license term only.

(c) A license for a developmental station subject to this Part shall be issued on a temporary basis and shall be valid for a specified period of time extending not more than one year from the date on which the license becomes effective.

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[1] A notation of the forfeiture of any construction permit under this provision will be placed in the records of the Commission as of the expiration date.

[2] See § 7.36.

[3] See § 61.62 of Part 61 of the Commission's rules governing the construction, filing, and posting of charges for interstate and foreign communications service.

§ 7.66 *Period of modified license.* When an application for modification of station license is granted, a superseding license shall, unless otherwise ordered, be issued for the unexpired period of the superseded license.

§ 7.67 *Simultaneous modification and renewal.* When an application is granted which necessitates the issuance of a modified station license less than 60 days prior to the expiration date of the license sought to be modified, and when an application for renewal of said license is granted subsequent or prior thereto, but within 30 days of expiration of the present license, the modified license as well as the renewal license will be issued to conform to the combined action of the Commission.

§ 7.68 *One license for plurality of marine-utility stations.* (a) Unless otherwise determined by the Commission, one station license may be granted to authorize the use and operation of a designated maximum number of marine-utility stations, normally in multiples of ten stations, whenever the following license elements are the same for each station and the requirement specified in paragraph (b) of this section is fulfilled:

(1) The station licensee;

(2) The conditions which establish and maintain control of the station by the station licensee;

(3) The local geographic area to which use of the particular station will be confined;

(4) The type(s) of transmitting equipment to be authorized;

(5) The authorized transmitter power of identical types of transmitting equipment to be authorized;

(6) The frequency assignment, and the authorized transmitter power, and class or classes of emission authorized for each radio-channel.

(b) The transmitting equipment authorized for use by the station license shall not be authorized in any other instrument of authorization issued by the Commission.

§ 7.69 *Transfer or assignment of station authorization.* Section 310 (b) of the Communications Act expressly provides that a station license granted by the Commission, the frequencies authorized to be used by the licensee, and the rights therein granted shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, or indirectly by transfer of control of any corporation holding such license, to any person, unless the Commission shall, after securing full information, decide that said transfer is in the public interest, and shall give its consent in writing.[4]

§ 7.70 *Authorized station location.* (a) Whenever a station (other than a marine-utility station) is to be used and operated, on and after the effective date of the station license, at any single location for a period of less than six months, the station location is construed to be temporary and shall be designated in the station authorization as temporary, together with either a specific temporary location or locations or within a prescribed geographic area, in accordance with information included in the related application for station authorization.

(b) Whenever a station (other than a marine-utility station) is to be used and operated, on and after the effective date of the station license, at a single location for six months or more, the station location is construed to be permanent and the particular location shall be specifically designated in the station authorization.

(c) When a station (other than a marine-utility station) which is authorized to be used and operated at a temporary location or locations remains at any single location for more than six consecutive months, an application for modification of the station license to specify such station location as permanent shall be filed not more than thirty days after the expiration of the six-month period involved.

(d) When a station (other than a marine-utility station), which is authorized to be used and operated at more than one temporary location, is moved from one radio inspection district to another for use and operation in the latter district, the station licensee shall so notify the Commission's engineers-in-charge of the respective districts. Such notification shall, if practicable, be given prior to such change in location but in any event not later than forty-eight hours thereafter.

(e) Prior authorization from the Commission is required before a station may be used and operated at any station location not authorized by either the station authorization or applicable rules and regulations of the Commission.[5]

§ 7.71 *Authorized control point.* (a) Unless otherwise permitted in exceptional cases, each station shall be associated with one or more specific control points which shall be designated in the station license as stated herewith:

(1) When no control point location is designated in an application, the control point shall be not more than 500 feet from the location of the authorized radio transmitting apparatus.

(2) When the control point is at a location more than 500 feet from that of the authorized radio transmitting apparatus, the control point location shall be designated as follows:

(i) In urban areas, the street address shall be specified.

(ii) In rural areas, the approximate location shall be specified in distance and direction from the transmitter in terms of feet and geographical quadrant, respectively; or in distance and direction from the center of a nearby established community in terms of statute miles and geographical quadrant, respectively.

(b) Prior authorization from the Commission is required before a change may be made in the location of an authorized control point or before any control point not authorized by the station license, or by applicable rules and regulations, may be utilized in respect to the particular station.[6]

(c) A dispatch point or points may be installed and used without obtaining any instrument of authorization from the Commission, provided, that in respect to public coast stations using telegraphy and limited coast stations using telegraphy, information relative to the location of each permanently established dispatch point, is submitted by the station licensee to the Commission for record purposes at the earliest practicable date relative to the date such dispatch point(s) is (are) permanently established.

§ 7.72 *Assignment of call signs.* (a) Stations subject to this part shall be assigned call signs in accordance with applicable provisions of the International Radio Regulations and the Communications Act as set forth in the following paragraphs of this section.

(b) Class I and Class II coast stations (public or limited) shall be assigned individual call signs each consisting of three letters, taken from either the group KAA through KZZ or the group WAA through WZZ.

(c) Class III coast stations (public or limited) shall be assigned individual call signs each consisting of three letters followed by three digits.

(d) Each station license issued to authorize the use and operation of one or more marine-utility stations shall designate a single call sign consisting of three letters followed by three digits.

(e) Stations on land in the maritime radiolocation service (including the maritime radionavigation service) shall be assigned individual call signs each consisting of three letters followed by three digits.

(f) Marine fixed stations and marine relay stations shall be assigned individual call signs each consisting of three letters followed by two digits.

(g) Marine control stations and marine repeater stations shall be assigned individual call signs each consisting of three letters followed by two digits.

(h) Marine receiver-test stations shall be assigned individual call signs each consisting of three letters followed by three digits.

(i) Developmental stations shall be assigned call signs of the category assignable under the provisions of this section to the class of station associated with the respective developmental station.

(j) In accordance with the preceding paragraphs of this section, call signs shall be assigned on a strict sequence basis, without advance reservation of particular call signs for specific stations or specific purposes.

§ 7.73 *Operation during emergency.*—(a) The licensee of any station subject to this part may, during a period of emergency in which the normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in communicating in a manner other than that specified in the instrument of authorization or in the rules and regulations governing the operation of such station: *Provided*, (1) That as soon as possible after the beginning of such emergency use, notice shall be sent to the Commission at Washington 25, D. C., and to the Engineer in Charge of the radio district in which the station is located, stating the nature of the emergency and the emergency use being made of the station; (2) that such emergency use of the station shall be discontinued as soon as substantially normal communication facilities are again available; and (3) the Commission and the Engineer in Charge be notified immediately when such special use of the station is terminated: *and provided further*, That, in no event, shall any station engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided by the Commission, or by law: *And provided further*, That the Commission may, at any time, order the discontinuance of any such emergency communication undertaken under this section.

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[4] See § 7.42 in respect to filing related applications.

[5] See §§ 7.32 and 7.34 relative to the filing of pertinent applications.

[6] See § 7.34.

(b) The Commission may authorize the licensee of any radio station, during a period of national emergency, to operate its facilities upon such frequencies, with such power and points of communication, and in such a manner beyond that specified in the station license as may be requested by the Army, Navy, or Air Force.

§ 7.74 *Involuntary suspension of station operation.* (a) If, for any reason beyond control of the station licensee, a public coast station temporarily reduces its normal scope or hours of service or suspends operation, the station licensee shall immediately notify the Commission at Washington 25, D. C., and the Commission's Engineer in Charge of the radio district in which the station is located. In such cases, the licensee shall furnish full particulars as to the reasons for such discontinuance, reduction or impairment of service, including a statement as to when normal service is expected to be resumed. In the event such action includes reduction or suspension of a watch normally kept on 500 kc or 2182 kc, immediate notification thereof shall be given by the station licensee to the nearest district office of the U. S. Coast Guard and to the Commission's Engineer in Charge of the radio district in which the station is located, together with notification of the estimated or known time of resumption of such watch. When normal service is resumed, immediate notification thereof shall be given to the Commisison at Washington 25, D. C., and to the Commission's Engineer in Charge of the radio district in which the station is located. When the watch to which reference is made herein is resumed, immediate notification thereof shall be given to the Coast Guard and to the Commission's Engineer in Charge.

(b) Notification need not be given with respect to involuntary reduction or suspension of the normal service of a limited coast station (provided a watch normally kept by such station on 500 kc or 2182 kc is not reduced or suspended thereby) or of any other station subject to this Part except public coast stations until such reduction or suspension exceeds 10 days in duration, whereupon a notification thereof shall be given to the Commission's Engineer in Charge of the radio district in which the station is located, together with notification of the known or estimated time of resumption of normal operation. In the event any reduction or suspension of the service of a limited coast station causes a reduction or suspension of a watch normally kept on 500 kc or 2182 kc, immediate notification thereof shall be given by the station licensee to the nearest district office of the U. S. Coast Guard and to the Commission's Engineer in Charge of the radio district in which the station is located, together with notification of the estimated or known time of resumption of such watch.

§ 7.75 *Voluntary suspension or discontinuance of station operation.* (a) The licensee of a public coast station shall not voluntarily discontinue, reduce, or impair service to a community or part of a community unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience or necessity will be adversely affected thereby. Such certificate may be granted upon application for such authority in accordance with the provisions of section 214 of the Communications Act and the provisions of § 7.46.

(b) When any station subject to this part discontinues or suspends operation for any reason within control of the station licensee, for a period exceeding 10 days, notification thereof shall also be given to the Commission's Engineer in Charge of the radio district in which the station is located, together, in the case of suspension, with a statement of the estimated or known time of resumption of normal operation. In the event any voluntary suspension, reduction, or discontinuance of operation includes discontinuance, reduction, or suspension of a watch normally kept by a coast station on 500 kc or 2182 kc, immediate notification thereof shall be given by the station licensee to the nearest district office of the U. S. Coast Guard and to the Commission's Engineer in Charge of the radio district in which the station is located, together with notification of the estimated or known time of resumption of any such watch that has been suspended.

SUBPART D—GENERAL STATION REQUIREMENTS

§ 7.101 *Inspection of stations.* Pursuant to section 303 (n) of the Communications Act, all stations subject to this part and all station records required by this part shall be available for inspection by authorized representatives of the Commission upon due notice given to the station licensee or his agent at such times and intervals which, within the discretion of the Commission, are considered reasonable and necessary to assure compliance with applicable rules, regulations, laws, treaties and international agreements.

§ 7.102 *Posting of station license.* (a) The current station authorization for each station (other than a marine-utility station) subject to this part, which is authorized for use and operation at a permanent location,[1] or at a single temporary location,[1] shall be posted in a conspicuous place at the principal control point of that station. At all other control points designated on the station authorization, a photocopy of the authorization shall be posted. In addition, a transmitter Identification Card (FCC Form 452-C), properly executed, shall be affixed to each transmitter of such station when such transmitter is not in view of, and readily accessible to, the responsible operator at the principal control position. The following information shall be entered on the Transmitter Identification Card by the permittee or station licensee:

(1) Name of permittee or licensee;

(2) Station call sign assigned by the Commission;

(3) Exact location or locations of the actual station authorization and any station records required by the Commission;

(4) The assigned frequency or frequencies on which the transmitting equipment is authorized to be operated; and

(5) Signature of the permittee or licensee, or his duly authorized agent.

(b) The current station authorization for a single marine-utility station and for each single station of any other class subject to this Part, which is of portable nature and is authorized for use and operation at two or more temporary locations, shall be posted either at the control point of the station or retained in an envelope or other suitable container affixed to the transmitting apparatus, either inside or outside of any cabinet or other structure in which the transmitting apparatus is contained.

(c) With respect to a plurality of marine-utility stations authorized by one station license in accordance with the provisions of § 7.68, the station license shall be retained by the licensee at any location where it is accessible to Commission inspection. In lieu of posting the license, a Transmitter Identification Card (FCC Form No. 452-c Revised) properly executed shall be affixed to each authorized transmitter, provided that where the transmitting equipment (such as may be installed in a land vehicle) is not visible from the operating position or is not readily accessible for governmental inspection, the Transmitter Identification Card shall be affixed to the Control apparatus at the station operating position. The following information shall be entered on the Transmitter Identification Card by the station licensee:

(1) Name of station licensee;

(2) Station call sign assigned by the Commission;

(3) Exact location or locations of the actual station license and any station records required by the Commission;

(4) The assigned frequency or frequencies on which the transmitting

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[1] See §§ 7.34 and 7.70.

equipment is authorized to be operated; and

(5) Signature of the licensee, or his duly authorized agent.

§ 7.103 *Requirements concerning station location.* (a) Unless otherwise required by exceptional conditions, the radio transmitting and receiving apparatus of each Class I public coast station first authorized by the Commission subsequent to January 1, 1951, shall, when such apparatus is to be used and operated on any frequency assignment below 5000 kc, be located within five statute miles of the open sea.

(b) Unless otherwise required by exceptional conditions, the radio transmitting and receiving apparatus of each Class II public coast station first authorized by the Commission subsequent to January 1, 1951, shall be installed at a location which, according to generally established engineering principles and standards, should result in minimum attenuation of emission, in so far as such attenuation is caused by land intervening between that location and the majority of ship stations with which communication is to be effected.

(c) Unless otherwise required by exceptional conditions, the radio transmitting and receiving apparatus of each Class III public coast station first authorized by the Commission subsequent to January 1, 1951, shall be centrally located, in so far as is practicable, in relation to the center of the geographic water area to which ship-shore communication is to be provided by the particular coast station, as specified in the related application for construction permit.

(d) Applicants for construction permits to establish coast stations for transmission on any frequency assignment(s) within the frequency band 156.35 Mc to 162.05 Mc shall cooperate in the selection of sites for radio transmitting facilities so as to minimize interferences (such, for example, as may be caused by intermodulation) to the service of other coast stations, base stations of any land mobile service, and United States government stations.

§ 7.104 *Facilities required for public coast stations.* (a) As a minimum, public coast stations using telegraphy shall be provided with the facilities designated herewith:

(1) Stations having a frequency assignment within the band 365 to 515 kc shall—

(i) be equipped to transmit efficiently with Classes A1 and A2 emission on the general maritime calling frequency (500 kc assigned frequency) and on at least one additional radio channel authorized for working within the band 365 to 515 kc;

(ii) be equipped to receive efficiently classes A1 and A2 emission on all radio-channels authorized for the maritime mobile service of telegraphy within the frequency band 365 to 515 kc.

(2) Stations having a frequency assignment below 150 kc shall—

(i) be equipped to transmit efficiently with class A1 emission on the calling frequency designated for the maritime service in this portion of the spectrum (assigned frequency 143 kc) and on at least one additional radio-channel authorized for working within the band 100 to 150 kc;

(ii) be equipped to receive efficiently class A1 emission on all radio channels authorized for transmission by mobile stations operating in the maritime mobile service of telegraphy within the band 100 to 150 kc.

(3) Stations having a frequency assignment above 4000 kc shall—

(i) be equipped to receive efficiently on each assigned frequency designated in this part for radiotelegraphy, which is in the same characteristic portion of the spectrum as is each frequency assignment above 4000 kc of the particular coast station.

(b) As a minimum, public coast stations using telephony shall be provided with the facilities designated herewith:

(1) Each coast station using telephony on frequencies within the band 1600 kc to 4000 kc shall be capable of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) with an antenna power of not less than 100 watts on the radio-channel of which 2182 kc is the authorized carrier frequency; provided that with respect to such stations outside the Great Lakes area, this requirement shall be effective on and after January 1, 1953.

(2) Effective on and after January 1, 1952, each coast station which is licensed to transmit by telephony on any radio-channel for working within the frequency band 156.35 Mc to 162.05 Mc, shall be capable of transmitting and receiving (and shall be licensed to transmit) class F3 emission on the radio-channel of which the authorized carrier frequency is 156.8 Mc.

(c) All coast stations shall comply with the following requirements:

(1) Each coast station which is licensed to transmit on the radio-channel of which 2182 kc is the authorized carrier frequency, shall be capable of efficiently receiving telephony (A3 emission) on this channel, and shall be capable also of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) on at least one other radio-channel authorized for working with ship stations in the band 2000 to 3500 kc.

(2) Each coast station which is licensed to transmit on the radio-channel of which 156.8 Mc is the authorized carrier frequency, shall be capable of efficiently receiving telephony F3 emission on this channel, and shall be capable also of transmitting and receiving (and shall be licensed to transmit) class F3 emission (modulation by voice frequencies) on at least one other radio-channel authorized for working with ship stations in the band 156.35 Mc to 162.05 Mc.

(3) Marine utility stations used on shore shall comply with the requirement of subparagraph (2) of this paragraph.

§ 7.105 *Special provisions relative to VHF facilities.* (a) Coast stations at locations separated by less than 150 statute miles, which transmit on a radio-channel above 100 Mc, shall minimize any interference between the particular stations using the same radio-channel above 100 Mc by a mutually agreeable time-sharing arrangement, subject to direction by the Commission if agreement cannot be attained by the involved station licensees. In addition, where practicable, such licensees shall use directive antennas to minimize interference between the particular stations.

(b) Coast stations at locations separated 150 statute miles or more, which transmit on a radio-channel above 100 Mc, shall minimize interference between the particular stations using the same radio-channel above 100 Mc in so far as is practicable by adjustment of radiated power (provided the authorized transmitter power is not exceeded), by adjustment of the antenna height (within the physical limitations approved by the Commission with respect to air navigation), or by employing appropriate antenna directivity. Appropriate remedial action in this respect may be specifically required of particular station licensees when, in the discretion of the Commission, such requirement must be imposed by a specific directive.

(c) Coast stations which transmit on a radio-channel above 100 Mc and are located within interference range on such channel of any station within a foreign country bordering on the United States, shall take such measures of the nature prescribed in paragraphs (a) and (b) of this section as may be practicable and appropriate to minimize interference to the involved foreign station(s), and shall keep the Commission fully informed of all pertinent developments.

§ 7.106 *Operating controls.* (a) The transmitting apparatus of stations subject to this part shall be installed and protected so as to be not accessible to other than duly authorized persons.

(b) Effective on and after January 1, 1952, such operating controls as necessarily are used for commencing and discontinuing normal operation of each coast station, such operating controls as necessarily are used for normally changing from each operating radio-channel to any other associated operating radio-channel in the same characteristic portion of the spectrum, and such operating controls as necessarily are used for normally changing from transmission to reception and vice-versa, shall be available at the principal operating location of the station and shall be readily accessible to the authorized operator. This requirement, however, need not be met by equipment intended for use only in emergencies and not used for normal communications.

(c) Effective on and after January 1, 1952, every coast station using telegraphy shall, when an authorized operator is present at the principal operating location, be capable of change-over from telegraph transmission to telegraph reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time.

(d) Effective on and after January 1, 1952, every coast station using telephony shall, when an authorized operator is present at the principal operating location, be capable of change-over from telephone transmission to telephone reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time.

(e) Effective on and after January 1, 1952, every coast station shall, during its hours of service and when the authorized operator is present at the principal operating location, be capable of—

(1) Commencing operation within one minute after the need to do so occurs;

(2) Discontinuing all emission within five seconds after emission is no longer required or after the necessity arises for emission to cease.

(f) Effective on and after January 1, 1953, every coast station using a multichannel installation for telegraphy shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from each operating radio-channel for telegraphy to any other operating radio-channel for telegraphy within—

(1) A period of five seconds if the particular radio-channels are within the same characteristic portion of the spectrum; or

(2) A period of fifteen seconds if the particular radio-channels are not within the same characteristic portion of the spectrum;

(3) *Provided, however*, That this requirement need not be met by equipment intended for use only in emergencies and not used for normal communication.

(g) Effective on and after the dates hereinafter designated in this paragraph, every coast station using a multi-channel installation for telephony shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from one operating radio-channel for telephony to another operating radio-channel for telephony within—

(1) A period of five seconds, when changing from the calling channel to a working channel and vice-versa within the frequency band 1600 kc to 4000 kc; effective on and after January 1, 1953; or

(2) A period of three seconds, when changing from the calling channel to a working channel and vice-versa within the frequency band 156 Mc to 162 Mc; effective on and after January 1, 1952.

(h) Whenever the same radio-channel is used for radiotelephone transmission and reception, means shall be provided so that transmission of the carrier wave may be either automatically "voice-controlled" or controlled manually by the person whose speech is being transmitted.

(i) Effective on and after January 1, 1952, each coast station located at a municipal harbor or port and using telegraphy on frequencies within the band 365 kc to 515 kc for communication with ship stations within 10 statute miles of the coast station transmitting location (except stations which are not capable of providing a plate input power in excess of 150 watts) must be provided with a device or arrangement readily permitting the use of a plate input power for telegraphy which is not in excess of 100 watts.

§ 7.107 *Antenna requirements.* (a) The antenna(s) of each public coast station shall, in so far as is practicable in each case, have electrical characteristics that will, in conjunction with the particular transmitting apparatus employed, assure maximum attainable efficiency in the conversion of antenna power to radiated power.

(b) All emission of a coast station (public or limited) or a marine-utility station operated on shore, using telephony on any frequency assignment within the frequency band 30 Mc. to 200 Mc. normally shall be polarized vertically at the source: *Provided*, The Commission may authorize the use of any other form of polarization in addition to or in lieu of vertical polarization if the applicant or station licensee makes a satisfactory showing that such authorization is necessary for effective communication or reduction of interference and would be beneficial to reception of the emission by mobile stations.

(c) The licensee of any coast station shall operate the station so as to provide a specified field strength pattern with respect to transmission and reception of signals if and when directed to do so by the Commission. For the purpose of determining the need for a particular field strength pattern, the Commission may require the licensee, prior to renewal of the station license, to conduct an appropriate field strength survey and to file the resultant data as part of the application for renewal of license.

§ 7.108 *Adjustment of equipment.* The transmitting equipment of each station subject to this part shall be operated, tuned, and adjusted so that there will be no radiation of emissions outside the authorized frequency band that interferes with the service of any other station. Any spurious emissions, including radio frequency harmonics and audio frequency harmonics, shall be maintained at the lowest practicable level.

§ 7.109 *Measurement of emission frequencies.*—(a) The licensee of each station subject to this part shall be responsible [2] for measurement of each carrier frequency in use by the station as stipulated in the following subsections of this section: *Provided*, That when a carrier does not exist (except for radar transmitters) [2] measurement shall be made of the frequency coinciding with the center frequency of the emission bandwidth, in lieu of measurement of the carrier frequency.

(b) Measurement of the carrier frequency shall occur during normal operating conditions, including with and without the application of amplitude modulation if such modulation is employed. In the case of a station using frequency modulation, measurement of the carrier frequency shall be made while modulation is not applied.

(c) Measurement of the carrier frequency shall be made by means independent of the carrier frequency determining elements of the transmitting apparatus, and the measuring equipment, shall be capable of revealing deviation in cycles per second from the authorized carrier frequency or the assigned frequency of the station with an accuracy of one-half the frequency tolerance authorized by the Commission.

(d) Measurement of the carrier frequency shall, as a minimum requirement, be made at the following times:

(1) When the involved transmitting apparatus is placed in service both initially and on each occasion after it has been removed (other than marine-utility stations and stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the frequency of the carrier (including marine-utility stations and stations of portable nature).

(3) As soon as is practicable after the licensee receives an official notice from the Commission that the carrier frequency or the frequency coinciding with the center of the emission band-width has been observed by the Commission to be beyond the frequency tolerance.

(e) Each frequency measurement performed in order to comply with the provisions of this section shall be recorded in the official records of the station. In each instance of measurement the record shall show the location of the transmitter, the location of the measuring equipment, the identity of the transmitter involved, the time and date of measurement, the indicated deviation in cycles per second above or below the authorized carrier frequency or (when a carrier does not exist) above or below the assigned frequency (or other appropriate data in respect to measurement of the frequencies of emission of a radar transmitter) and the signature of the person(s) who made the measurement, together with the name of any measurement service with whom such person(s) may be associated for this purpose. Each original record of measurement shall, wherever practicable, be continuously retained at the particular station until after the date of expiration or cancellation of the current station license, and shall be made available to the Commission upon request or during inspection of the station by an official representative of the Commission. When such retention of these records at the station is deemed by the licensee to be impracticable (such as may be the situation in respect to marine-utility stations and stations of portable nature) the original records shall be retained under jurisdiction of the station licensee at any location in the United States where they can be made readily available for inspection upon request by the Commission or an official representative thereof.

(f) Measurement of frequency required by the provisions of this section may, at the option of the station licensee, be made by any qualified engineering measurement service: *Provided*, That nothing contained in this paragraph shall be construed to change or diminish in any respect the responsibility of the station licensee for proper functioning and operation of the station in accordance with law.

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[2] The licensee of a station on land using a radar transmitter shall take the necessary measures to insure that the transmitter operates within the emission limits specified in § 7.133.

§ 7.110 *Measurement of transmitter power.* (a) The actual power of each radio transmitter of a coast or fixed station, subject to this part, shall be maintained within the following tolerance of the specific power authorized for that transmitter by the Commission:

(1) When the maximum operating power only is indicated, the actual power shall, insofar as is practicable, not be more than that necessary to carry on the service for which the station is licensed and in no event more than 5 percent above the maximum power authorized;

(2) When the exact authorized power is indicated, the actual power shall, at all times, be within the limits of 105 percent and 90 percent of the authorized power.

(b) For the purpose of assuring adherence to the requirement of paragraph (a) of this section, each radio transmitter rated by the manufacturer as being capable of a plate input power in excess of 200 watts or an antenna power in excess of 100 watts and initially placed in service after July 1, 1951, in a coast or fixed station, subject to this Part, shall be fitted with the instrument(s) necessary to indicate the actual plate input power to the transmitter whenever the latter is in use: *Provided*, That on and after January 1, 1956, this requirement shall apply to all such transmitters (including stations of portable nature) rated by the manufacturer with respect to power as set forth in this paragraph.

(c) When the power of a transmitter in a coast or fixed station, subject to this part, as rated by the manufacturer, is capable of being more than 105 percent of the authorized power, the station licensee, effective on and after July 1, 1951, shall employ an approved procedure to determine that the actual power does not exceed the authorized power. This determination shall be made and the result thereof entered in the licensee's records (which shall be made available to the Commission or an official representative thereof, upon request) as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (other than marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation;

(2) As soon as practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the actual power (including marine-utility stations and stations of portable nature);

(3) When required by an official representative of the Commission on the basis that the actual power appears, from an official inspection of the station, to exceed the authorized power.

§ 7.111 *Modulation adjustments for telephony.* (a) Coast stations, fixed stations, and marine-utility stations subject to this Part and using Class A3 emission for telephony shall be capable of proper technical operation with peak modulation percentage between 75 and 100 percent. In so far as is practicable, the AM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces peak modulation percentages within these limits.

(b) Coast stations, fixed stations and marine-utility stations subject to this part using class F3 emission for telephony shall be capable of proper technical operation with peak modulation percentage as high as is practicable in reference to the frequency swing normally regarded as 100 per modulation. In general, the FM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces, on this basis, peak modulation percentages between 75 and 100 percent.

(c) The adjustments required by paragraphs (a) and (b) of this section shall be made and recorded in the licensee's records as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (except for marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the percentage modulation (including marine-utility stations and other stations of portable nature).

(3) When required by the Commission on the basis that the percentage modulation observed during an official inspection of the station by an official representative of the Commission appears to not comply with the requirement of paragraph (a) or (b) of this section.

§ 7.112 *General requirements for receiving apparatus.* (a) The radio equipment of each coast station, or marine-utility station, using telegraphy or telephony, must be capable of permitting the reception of the class or classes of emission on the frequency or frequencies, normally received for the service carried on. The technical arrangement of the station apparatus shall be such that the necessary reception of emissions can be readily effected prior to the transmission of any signals or communications by the coast or marine-utility station on the associated transmitting frequency.

§ 7.113 *Facilities for busy signal in telephony.* (a) A "busy" signal, when used by a coast station in accordance with the provisions of paragraph (e) of § 7.312 may be transmitted by appropriately modulating the carrier wave of the station by means of a single audio frequency (sine wave) regularly interrupted, as follows:

1. Modulating frequency: 1000 cycles per second.
2. Rate of interruption: 60 times per minute.
3. Duration of each interruption: 0.5 second.
4. Tolerance for each of the factors 1, 2, 3: 5.0 percent.

(b) As an alternative to the technical factors set forth in paragraph (a) of this section, other appropriate technical factors may be authorized by the Commission for the purpose of a "busy" signal pursuant to paragraph (e) of § 7.312.

§ 7.114 *Required coast station clock.* (a) A reliable clock with a second hand shall be installed at the radio operating control point of each coast station licensed for telegraphy on frequencies below 515 kilocycles. This clock shall be mounted in a position that will allow the divisions between minutes to be easily and accurately read by the operator from his normal operating position. In each coast station licensed to transmit on 500 kilocycles, the required clock shall be provided with a sweep second hand and shall be mounted in a position that will allow the second dial to be easily and accurately read by the operator from his normal operating position.

(b) On each day the coast station is operated, the time indicated by this clock shall be compared with standard time and if a deviation is observed, the clock shall be adjusted to accurately coincide with standard time: *Provided*, That this requirement shall not preclude adjustment of this clock to Greenwich mean time pursuant to the International Radio Regulations.

§ 7.115 *Retention and availability of radio station logs.*[3] (a) All station logs which are required under those provisions of this Part pertaining to the particular classes of stations subject to this Part shall be retained by the licensee for a period of one year from date of entry and for such additional periods as required by the following subparagraphs:

(1) Station logs involving communications incident to a distress or disaster shall be retained by the station licensee for a period of 3 years from date of entry;

(2) Station logs which include entries of communications incident to or involved in an investigation by the Commission and concerning which the station licensee has been notified shall be retained by the station licensee until such licensee is specifically authorized in writing by the Commission to destroy them.

(3) Station logs incident to or involved in any claim or complaint of which the station licensee has notice shall be retained by such licensee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

(b) Station logs shall be made available to an authorized representative of the Commission (including any engineers of the Commission's Field Engineering and Monitoring Division) upon request.

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[3] See Parts 43 and 46 of the Commission's rules concerning preservation of records of common carriers.

§ 7.116 *Requirements as to control points.* At each control point of each coast or fixed station subject to this part the following facilities shall be provided:

(1) A carrier-operated device which will provide continuous visual indication whenever the transmitting apparatus is supplying power at radio-frequency to the antenna; or, in lieu thereof, a pilot lamp or meter or equivalent device which will provide continuous visual indication whenever the transmitter control circuits have been placed in a condition to actuate the radio transmitting apparatus: *Provided, however*, That the provisions of this subsection shall not apply to marine-utility stations.

(2) Equipment to permit the responsible operator to aurally monitor all transmissions originating at dispatch points under such operator's supervision, if dispatch points are utilized.

(3) Facilities which will readily permit the responsible operator either to disconnect the dispatch point circuits from the radio transmitting apparatus or to render such apparatus inoperative from any dispatch point under the supervision of such operator; and

(4) Facilities which will permit the responsible operator to energize and de-energize the radio transmitting equipment at will.

SUBPART E—STANDARD TECHINAL REQUIREMENTS

§ 7.131 *Authorized frequency tolerance.* (a) Unless the particular instrument of authorization specifically provides otherwise, the frequency tolerances[1] authorized for stations on land in the maritime services subject to this part shall be as prescribed in the following paragraphs.

(b) Authorized frequency tolerances for coast stations operating on frequencies below 515 kc or within the frequency-band 1,600 kc to 25,000 kc:

Frequency ranges	Applicable until Jan. 1, 1953, to transmitters installed before Jan. 1, 1950	Applicable to transmitters installed after Jan. 1, 1950, and to all transmitters after Jan. 1, 1953
	Percent	*Percent*
(1) From 14 to 515 kc	0.1	0.02
(2) From 1,600 to 25,000 kc	0.02	0.005

(c) Authorized frequency tolerances for coast stations operating on frequencies above 30 Mc and for marine-utility stations:

	Percent
(1) From 30 to 100 Mc:	
For stations licensed to operate with a plate input power not in excess of 3 watts	0.02
For all other stations	.01
(2) From 100 to 200 Mc:	
For stations licensed to operate with a plate input power not in excess of 3 watts	.01
For all other stations	.005

(d) Authorized frequency tolerances for fixed stations operating in the maritime fixed services:

Frequency range	Applicable until Jan. 1, 1953, to transmitters installed before Jan. 1, 1950	Applicable to transmitters installed after Jan. 1, 1950 and to all transmitters after Jan. 1953
(1) From 2100 to 2210 kc; Marine fixed stations and marine receiver-test stations.	*Percent* 0.01	*Percent* 0.005

	Percent
(2) From 72 to 76 Mc: Marine control, marine repeater, and marine relay stations	0.005
(3) From 100 to 200 Mc: Marine receiver-test stations	.005

(e) The frequency tolerance authorized for stations on land operating in the maritime radiolocation service shall be:

(1) When using radar transmitter (s) only, within a frequency band above 2400 Mc, the frequency tolerance is prescribed as follows: The frequency at which maximum emission occurs shall be within the authorized frequency-band and shall not be closer than 1.5/T megacycles per second to the upper and lower limits of the authorized frequency-band, where "T" is the pulse duration in microseconds.

(2) For other stations on land operating in the maritime radiolocation service the authorized frequency tolerance shall be specified in the instrument of authorization issued in behalf of each station.

§ 7.132 *Authorized classes of emission.* (a) When the class of emission is specifically designated in the instrument of authorization, stations on land in the maritime services subject to this Part shall use emission in conformity with the terms of that document. Otherwise, such stations are authorized to employ classes of emission as follows:

Frequency-band and classes of emission authorized

(1) Coast stations using telegraphy:	
14 to 160 kc	A1, and for brief testing AO;
160 to 515 kc	A1, A2,[1] A2a,[1] A2b,[1] and for brief testing AO;
2,200 kc to 25,000 kc	A1, A2,[1] A2a,[1] A2b,[1] and for brief testing AO;
(2) Coast stations and marine-utility stations using telephony:	
1600 kc to 30 Mc	A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing AO;
30 Mc to 50 Mc	A3, A3a, A3b, F3; and for brief operating signals A1, A2, A2a, A2b, F1, F2; also for brief testing AO, FO;
156.35 Mc to 162.05 Mc	F3; and for brief operating signals F1 and F2; also for brief testing FO;
For other frequencies or frequency-bands.	As designated in the station authorizations.
(3) Marine-fixed stations:	
2100 kc to 2210 kc	A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing AO.
Marine receiver-test stations:	
2100 kc to 2210 kc	Primarily A3, A3a, A3b; secondarily for test calling signals; AO, A1, A2, A2a, A2b;
156.25 Mc to 157 Mc	Primarily F3; secondarily for test calling signals; FO, F1, F2.
Marine control, marine repeater and marine relay stations:	
72 Mc to 76 Mc	A1, A2, A2a, A2b, A3, F1, F2, F3; and for brief testing AO, FO.
(4) Stations using radar transmitters only:	
Above 2400 Mc	PO.

[1] Permissible by keying the modulated emission. Keying the modulating audio frequency only, without interruption of the carrier wave, is not permissible. The use of any audio frequency pulse device such as a so-called "chopper" is prohibited. The use of these classes of emission on frequencies between 4,000 kc and 23,000 kc, except for stations of survival craft and for special purposes, will be prohibited when Article 33 of the International Radio Regulations of Atlantic City, 1947, becomes effective.

Stations of any category not designated in subparagraph (1), (2), (3) and (4) of this paragraph shall use the class or classes of emission specified in the particular station authorization.

(b) Classes of emission not authorized in paragraph (a) of this section may be authorized by the Commission in special circumstances, subsequent to a satisfactory showing by the applicant of a need therefor and provided harmful interference will not result from the use thereof. Each application requesting such special authorization shall fully describe the emission described to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission is required.[2]

§ 7.133 *Authorized emission-bandwidth.*[3] (a) When the authorized emission-bandwidth is specifically designated in the instrument of authorization, stations on land in the maritime services subject to this part shall use emission-bandwidth(s) in conformity with the terms of that document. Otherwise, such stations shall use emission-bandwidths not exceeding those set forth in this section for the respective classes of emission authorized in § 7.132.

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[1] Frequency tolerance is defined by § 7.8 (m).

[2] For information regarding the classification of emissions and the calculation of the bandwidth, reference should be made to Part 2 of the Commission's rules.

[3] For definition of the term "emission-bandwidth", see paragraph (g) of § 7.8.

(b) The authorized emission-bandwidths hereinafter designated are established in relation to the operational factors set forth in the following sub-subparagraphs:

(1) Class A0 emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally an amplitude-modulated wave;

(2) Class A1 emission means a carrier wave (without the use of modulating audio frequency) keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters;

(3) Class A2 emission means a carrier wave amplitude-modulated at audio frequency not exceeding 1,250 cycles per second, the modulated carrier wave being keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters. (The authorized emission-bandwidths for classes A2, A2a, and A2b emission are designated hereinafter on this basis);

(4) Class A3 emission means a carrier wave amplitude-modulated at audio frequencies corresponding to those necessary for intelligible speech transmitted at conversational speed. (The authorized emission-bandwidths for classes A3, A3a, and A3b emission are designated hereinafter on this basis);

(5) Class F0 emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally a frequency-modulated wave;

(6) Class F1 emission means a continuous wave (without the use of modulating audio frequency), the frequency of which is alternately shifted between the normal value and another specific value, by keying normally for telegraphy, so as to transmit intelligence in the International Morse code. The authorized bandwidth for class F1 emission is designated hereinafter on the basis of the bandwidth authorized for class F2 emission;

(7) Class F2 emission means a continuous wave frequency-modulated at such audio frequency and with such deviation ratio as to not exceed the authorized emission-bandwidth, the modulating frequency being keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters.

(8) Class F3 emission means a continuous wave frequency-modulated at audio frequencies corresponding to those necessary for intelligible spech transmitted at conversational speed, with a deviation ratio of any value necessary for effective communication, provided the resulting emission shall not exceed the authorized emission-bandwidth.

(9) The keying of a carrier wave or the amplitude modulation of a carrier wave by means of audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective signalling code intended to actuate a selective-calling device, shall be construed as class A1 emission or class A2, A2a, or A2b emission, respectively, within the limits of the respective authorized emission bandwidths hereinafter set forth; provided that for class A2, A2a, or A2b emission, the frequency of modulation does not exceed 1300 cycles per second on radio-channels authorized for telegraphy, nor 3000 cycles per second on radio-channels authorized for telephony.

(10) The frequency-shift keying of a carrier wave or the frequency-modulation of a carrier wave at audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective signalling code intended to actuate a selective-calling device, shall be construed as class F1 emisison or class F2 emission respectively, within the limits of the respective authorized emission-bandwidths hereinafter set forth; provided the frequency deviation used, and in the case of class F2 emission the modulating frequency or frequencies used, is (are) such that the emission in fact does not exceed the respective authorized emission-bandwidth.

(11) Class P0 emission means pulse transmission with the absence of any modulation intended to carry information, as used by ship radar stations licensed by the Commission.

(c) (1) The authorized emission-bandwidths for the classes of emission authorized in § 7.132 shall be as follows:

Class of emission	Emission designator	Emission-bandwidth authorized for transmission of intelligence [1]
AO	None	None.
A1	0.15, A1	150 cycles per second.
A2	2.7, A2	2,700 cycles per second.
A2a	1.35, A2a	1,350 cycles per second.
A2b	2.7, A2b	2,700 cycles per second.
A3	8, A3	8,000 cycles per second.
A3a	4, A3a	4,000 cycles per second.
A3b	8, A3b	8,000 cycles per second.
FO	None	None.
F1:		
For 35 Mc to 76 Mc	36, F3	36,000 cycles per second.
For 156.35 Mc to 162.05 Mc	42, F3	42,000 cycles per second.
F2:		
For 35 Mc to 76 Mc	36, F3	36,000 cycles per second.
For 156.35 Mc to 162.05 Mc	42, F3	42,000 cycles per second.
F3:		
For 35 Mc to 76 Mc	36, F3	36,000 cycles per second.
For 156.35 Mc to 162.05 Mc	42, F3	42,000 cycles per second.
PO	Variable, according to the authorized frequency band.	The frequency at which maximum emission occurs shall be within the authorized frequency band and shall not be closer than 1.5/T megacycles per second to the upper and lower limits of the authorized frequency band, where "T" is the pulse duration in microseconds.

[1] This bandwidth does not take into consideration the effect of modulation caused by any alternating component(s) of electron-tube grid, anode, or cathode electric power supplies, which modulation is not intended to convey intelligence.

(2) With reference to the "emission designator" expressed in subparagraph (1) of this paragraph when the authorized class of emission is specifically designated in the station authorization and is prefixed by a numeral, that numeral specifies the authorized emission-bandwidth in kilocycles per second to be occupied by that class of emission in accordance with all other terms and conditions of the station authorization.

(3) In the actual operation of a station on land subject to this part unless otherwise provided by the station authorization,

(i) When a carrier is present, the frequency coinciding with the center of the frequency-band occupied by the emission-bandwidth shall, when class A2, A2b, A3, F2, or F3 emission is being used, be the same as the carrier frequency;

(ii) When a carrier is not present, the frequency-band occupied by the emission-bandwidth shall be within the authorized frequency-band.

(d) Bandwidths in excess of those set forth in paragraph (c) of this section or emission-bandwidths for other classes of emission may be authorized and set forth in the instrument of authorization if approved by the Commission subsequent to a satisfactory showing by the applicant of need therefor. Each application requesting such special authorization shall fully describe the emission desired to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission-bandwidth is required.

§ 7.134 *Authorized transmitter power.* (a) Stations on land subject to this part may use such antenna power as is necessary to carry on the service for which the station is licensed, on condition that the maximum authorized transmitter power shall not be exceeded. Unless the station authorization specifically provides otherwise, the maximum authorized transmitter power (as defined in paragraph (kk) of § 7.8) shall not exceed the particular power set forth in the following subsections which is applicable under the controlling factors designated therein in direct relation to that power.

(b) For coast stations using telegraphy on frequencies below 25,000 kc, the maximum authorized transmitter power shall be:

Maximum authorized transmitter power (with or without modulation)

Frequency-band in which transmission occurs:	*Kilowatts*
70 kc to 150 kc	80
150 kc to 515 kc	20
4,000 kc to 25,000 kc	80

(c) For coast stations using telephony on frequencies below 25,000 kc, the maximum authorized transmitter power shall be:

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter power (when no modulation is present) frequency band in which transmission occurs					
	2,000-4,000 kc.		4,000-5,000 kc.		5,000-25,000 kc.	
	Day	Night	Class I station	Class II station	Class I station	Class II station
	Watts	*Watts*	*Kilowatts*	*Watts*	*Kilowatts*	*Watts*
Class C—plate or plate and screen-grid modulated	1,500	700	70	1,500	70	1,500
Class C—control, screen, or suppressor-grid modulated	3,000	1,400	140	3,000	140	3,000
Class C—cathode modulated	2,400	1,120	112	2,400	112	2,400
Class B—linear	3,000	1,400	140	3,000	140	3,000
Class BC—high efficiency	1,800	840	84	1,800	84	1,800
Other classes	As specified in the station authorization					

(d) For coast stations and marine-utility stations using telephony on any frequency assignment within the frequency-band 35 Mc to 44 Mc and employing amplitude modulation (AM); the maximum authorized transmitter power shall be:

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter power (when no modulation is present)	
	Coast stations	Marine-utility stations
	Watts	*Watts*
Class C—plate, or plate and screen-grid modulated	100	10
Class C—control, screen, or suppressor-grid modulated	200	20
Class C—cathode modulated	160	16
Class B—linear	200	20
Class BC—high efficiency	120	12
Other classes	As specified in the station authorization	

(e) For coast stations and marine-utility stations using telephony on any frequency assignment within one or more of the following frequency-bands, and employing frequency modulation (FM), the maximum authorized transmitter power shall be:

Frequency band in which operation occurs	Maximum authorized transmitter power (without reference to modulation)		
	Public coast stations	Limited coast stations	Marine-utility stations
	Watts	*Watts*	*Watts*
35 Mc to 44 Mc	100	100	10
156.25 Mc to 157.05 Mc	250	100	10
161.85 Mc to 162.05 Mc	1,000		

(f) For stations in the maritime fixed services, the maximum authorized power shall be as prescribed herewith:

Frequency band in which operation occurs	Maximum authorized transmitter power (when no modulation is present)
Marine fixed stations and marine receiver-test stations using telephony (amplitude modulation):	
2100 kc to 2210 kc.:	
Class C—plate, or plate and screen-grid modulated	150 watts.
Class C—control, screen, or suppressor-grid modulated	300 watts.
Class C—cathode modulated	240 watts.
Class B—linear	300 watts.
Class BC—high efficiency	180 watts.
Other classes	As specified in authorization.
Marine receiver-test stations using telephony (frequency modulation):	
156.35 Mc to 157.45 Mc	100 watts.

(g) For marine control, marine repeater, and marine relay stations operating within the frequency band 72 to 75 Mc, and for other classes of stations subject to this part operating on frequencies above 162.05 Mc, the authorized transmitter power shall be specified in the respective station authorization.

(h) (1) For the purpose of assuring adherence to the requirements of this section, the authorized transmitter power, with reference to paragraphs (hh) and (kk) of § 7.8, shall be computed for electron-tube transmitters by the method set forth in the following subparagraphs.

(2) The authorized transmitter power shall be the sum of the products obtained by multiplying the effective anode (plate) voltage, applied to each electron tube of the last radio stage supplying radio-frequency power to the antenna, by the effective anode (plate) current flowing through each such tube, or shall be the sum of the actual powers supplied to each such tube.

(3) Measurement of the effective anode (plate) voltage shall be accomplished by means of a direct-current type voltmeter (as applicable) or an alternating-current type voltmeter of proper frequency range (as applicable), each such instrument being of standard accuracy and reliability. Where the same voltage is applied to more than one electron tube, measurement of this voltage shall be regarded as measurement of the voltage applied to each individual electron tube of that particular group.

(4) Measurement of the effective anode (plate) current shall be accomplished by means of a direct-current (d'Arsonval galvanometer movement) type ammeter of standard accuracy and reliability. Where the anode (plate) current through more than one electron tube flows through a common point in the electrical circuit, measurement of the current at this point shall be regarded as measurement of the total effective anode (plate) current flowing through all electron tubes of that particular group.

(5) Measurement of the actual power in watts supplied to the anode (plate) circuit of one or more electron tubes shall be acceptable provided a wattmeter properly activated by the form of voltage and current supplied is employed, and is of standard accuracy and reliability.

(6) When any current, in addition to the actual anode (plate) current, flows through an ammeter or wattmeter being used for measurements in accordance with this paragraph (such as screen-grid current), such current, unless separately measured, shall not be deducted from the current measured for the purpose of this paragraph.

§ 7.135 *Suppression of receiver radiation.* (a) On and after January 1, 1956, the use or operation in coast stations, marine utility stations, or marine fixed stations of the following type of radio receiving equipment shall be prohibited:

(1) Radio receiving equipment which, when used or operated either with or without connection to an actual antenna, creates an electromagnetic field, at any radio frequency, of more than 0.1 microvolt per meter at a distance over seawater of more than one nautical mile from the receiver;

(2) Radio receiving equipment which, when in operation, is capable of delivering more than 400 micromicrowatts of power at any radio frequency to an artificial antenna having electrical characteristics designated by the Commission as equivalent to those of the average receiving antenna(s) used in practice by the class of station involved.

(3) Radio receiving equipment shall be deemed capable of meeting the requirement of subparagraph (1) of this paragraph if, when adjusted for radio reception at each frequency within its tuning range, it is not capable of delivering power of more than 400 micromicrowatts at any radio frequency to an artificial antenna having electrical characteristics designated by the Commission as equivalent to those of the average

receiving antenna(s) used in practice by the class of station involved.

§ 7.136 *Type approval of transmitters for licensing.* (a) Upon written request therefore made by the manufacturer or applicant for related station authorization, approval of a specific and readily identifiable type of radio transmitter as being capable of complying with all requirements of the Commission solely for the purpose of authorizing such transmitter in accordance with the provisions of § 7.21 will be given formally by the Commission subsequent to a satisfactory showing of compliance made by the applicant. The necessary showing of compliance shall, as a minimum, be in the form of a written statement (together with such supplemental charts, graphs, illustrations, etc., as may be deemed appropriate by the applicant for type approval) over the signature of a competent radio engineer attesting to actual technical performance of the transmitter in accordance with all pertinent rules, regulations, and international agreements which must be met by the class of station for which the transmitter is intended to be licensed.

(b) Request for type approval and showing of compliance pursuant to the provisions of paragraph (a) of this section shall be submitted in duplicate to the Commission at Washington 25, D. C., and shall be designated for attention of the Marine Division. One copy of such showing of compliance shall be signed under oath or affirmation by the engineer who conducted or supervised the related technical performance of the particular type of transmitter for the purpose of securing type approval by the Commisson.

(c) In the event the written showing of compliance prescribed by paragraphs (a) and (b) of this section is deemed by the Commission to not furnish all information or data which it requires for the purpose of giving type approval to a particular type of radio transmitter, the Commission may supplementally require the applicant for such type approval to demonstrate by actual operation of the involved equipment in the presence of one or more engineers of the Commission that the same will, in fact, comply with all pertinent rules, regulations, and international agreements. In the event the showing of compliance is finally adjudged by the Commission to be unsatisfactory for the purpose of type approval for licensing of the particular type of transmitter, such type approval will not be given and that type of transmitter will not be licensed for the involved class of station.

§ 7.137 *Special requirements for radiotelephone transmitters.* (a) Except for transmitters authorized solely for developmental stations, each radiotelephone transmitter first licensed by the Commission after July 1, 1951, for use and operation in a coast station, a marine-fixed station or a marine-utility station on shore, and all radiotelephone transmitters licensed by the Commission after January 1, 1953, for use and operation in such classes of stations shall be provided with a device that will automatically prevent modulation in excess of 100 percent. This requirement, however, shall not apply to transmitters incapable of a plate input power exceeding three watts which are authorized for marine-utility stations and other stations of portable nature.

(b) (1) Each radiotelephone transmitter authorized in a coast station license or a marine-utility station license granted, modified, or renewed by the Commission after July 1, 1951, for use and operation at frequencies above 30 Mc (other than transmitters authorized solely for developmental stations), must be a type which is approved by the Commission pursuant to the provisions of § 7.136.

(2) Before being finally considered for type approval, such transmitters shall, in addition to meeting all other applicable requirements, comply with the following limitations and operating conditions:

(i) When radiating F1, F2, or F3 emission on each marine radio channel within the frequency-band 35 Mc to 44 Mc, with 100 percent[4] modulation applied, the frequency deviation[4] shall not exceed 12 kc.

(ii) When radiating F1, F2, or F3 emission on each marine radio channel within the frequency-band 156 Mc to 158 Mc, with 100 percent[4] modulation applied, the frequency deviation[4] shall not exceed 15 kc.

(iii) When radiating class F1, F2, or F3 emission on each radio channel within the frequency band 35 Mc to 44 Mc, any emission appearing on any radio frequency removed from the carrier frequency be not less than 18 kc nor more than 36 kc shall be attenuated 25 decibels or more below the intensity of the unmodulated carrier. Any emission appearing on any radio frequency removed from the carrier frequency by more than 36 kc shall be attenuated 60 decibels or more below the intensity of the unmodulated carrier: *Provided*, That for transmitters incapable of plate input power of more than 3 watts, this attenuation shall be 40 decibels or more below the intensity of the unmodulated carrier.

(iv) When radiating class F1, F2, or F3 emission on each marine radio channel within the frequency band 156.35 Mc to 162.05 Mc, any emission appearing on any radio frequency removed from the carrier frequency by not less than 21 kc nor more than 42 kc shall be attenuated 25 decibels or more below the intensity of the unmodulated carrier. Any emission appearing on any radio frequency removed from the carrier frequency by more than 42 kc shall be attenuated 60 decibels or more below the intensity of the unmodulated carrier: *Provided*, That for transmitters incapable of plate input power of more than 3 watts, this attenuation shall be 40 decibels or more below the intensity of the unmodulated carrier.

§ 7.138 *Special requirements for radar transmitters.* (a) Each radar transmitter authorized for use in the maritime radiolocation service by any station license granted, modified, or renewed by the Commission after July 1, 1950 (other than licenses for developmental stations) must be type-approved by the Commission pursuant to section 7.136. In addition to meeting all other applicable requirements, such transmitters shall, in addition, comply with the limitations and conditions set forth in paragraph (b) of this section.

(b) (1) The design and construction of the radar transmitter shall be such that, when properly installed, its use will not produce harmful interference to any other radiolocation service or any maritime mobile service;

(2) The radar transmitter shall not have means available for any external adjustment(s) which can result in a deviation from the terms of the station authorization or any deviation from the applicable technical requirements for stations on land using radar stations which are stipulated in this part.

SUBPART F—OPERATOR REQUIREMENTS

§ 7.151 *Authorized operator required.* (a) Except as otherwise provided by any applicable order of the Commission, the actual operation of all transmitting apparatus in any radio station subject to this part shall be carried on only by a person holding an operator license issued by the Commission in accordance with Part 13 of the Commission's rules, subject, however, to the following provisions:

(1) When the station is used for telephony, the person actually operating the transmitting apparatus (normally a person holding an operator license issued by the Commission in accordance with Part 13 of the Commission's rules), may if authorized by the station licensee to do so, permit any person to speak over the station microphone: *Provided*, That during such transmission the station licensee or the licensed operator (acting in this respect as the station licensee's agent) shall exercise his lawful control with respect to operation of the station so as to insure compliance with all applicable laws and regulations. In this respect, a microphone (located, for example at a dispatch point) used in connection with any land-wire telephone circuit which is electrically connected to the modulating system of the radiotelephone transmitting apparatus shall be construed for the purpose of this subsection to be the station microphone.

(2) When the station is used for telegraphy, transmitted manually by means of the international Morse code, the transmitting telegraph key shall, wherever its location, be manipulated only by a person who holds an operator license of the class valid for the operation of the particular class of station being operated.

§ 7.152 *Location of authorized operator.* (a) Whenever the transmitting apparatus of a station subject to this part is being used or operated, and the provisions of section 318 of the Communications Act (in so far as such provisions require the actual operation of such apparatus only by a person holding an operator license of the proper class issued by the Commission) are not waived by the Commission, at least one person holding an operator license of the proper class as prescribed in Part 13 of the Commission's rules shall be on duty at an authorized control point[1] of that station and shall be responsible for proper operation of the station as controlled from that location.

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[4] See paragraphs (x), (y), and (cc) of § 7.8.

(b) Subject to the conditions stipulated in § 7.151, an unlicensed person at a dispatch point[2] may, after being authorized by the station licensee to do so, operate from that point a coast station or a fixed station: *Provided, however,* That such operation shall be under the direct supervision and responsibility of a person holding an operator license of the proper class issued by the Commission, who is on duty at an authorized control point associated for this purpose with the respective dispatch point.

§ 7.153 *Unattended operation of fixed stations.* (a) No person, whether or not a licensed operator, is required to be in attendance at any marine repeater station subject to this part which is licensed for operation solely on frequencies above 72 Mc with an authorized transmitter power not in excess of 100 watts when such station is being used and operated for re-transmission by self-actuating means of signals or communications being received simultaneously at that station from a marine control station, a marine relay station, or another marine repeater station: *Provided,*

(1) The emission of the station is controlled positively and solely by the received radio signals which, in accordance with the station authorization, are intended to effect such control.

(2) The activation and de-activation of the station is controlled positively by either radio or wire-line signals transmitted from an authorized control point at which a duly licensed operator exercises such control.

(b) Nothing contained in paragraph (a) of this section shall be construed to change or diminish in any respect the responsibility of the station licensee for having and maintaining control of the marine-repeater station or for proper functioning and operation of the station in accordance with law.

§ 7.154 *Adjustment or test of equipment.* Notwithstanding any other provisions of this subpart, all adjustments or tests of radio transmitting apparatus in any station subject to this part during or coincident with the installation, servicing, or maintenance of such apparatus which may affect the proper operation of such station, must be performed by or under the immediate supervision and responsibility of a person holding a first or second class commercial radio operator license, either radiotelephone or radiotelegraph, who shall be responsible for the proper functioning of such transmitting apparatus in accordance with the radio law and the Commission's rules and regulations and for the avoidance and prevention of harmful interference from improper transmitter external effects. Nothing in this section shall be construed to change or diminish in any respect the responsibility of any station licensee for having and maintaining control over the station licensed to him, or for the proper functioning and operation of such station in accordance with the terms of the station license.

§ 7.155 *Posting of operator license.* (a) Except as otherwise provided in paragraph (b) of this section, when a licensed operator is required for the operation of a station subject to this part, each licensed operator involved shall observe the applicable requirements of Part 13 of the Commission's rules with respect to the posting of operator licenses.

(b) The requirement of paragraph (a) of this section with respect to posting of operator licenses shall not apply to marine-utility stations on shore if the posting of a license in the manner required by Part 13 of the Commission's rules is impracticable, upon the express condition that the licensed radio operator engaged in operating the station shall have on his person either his required operator license or a duly issued verification card (FCC Form 758-F) attesting to the existence of that license.

SUBPART G—GENERAL OPERATING REQUIREMENTS

§ 7.171 *International Regulations applicable.* In addition to being regulated by applicable rules of this part, the use and operation of stations subject to this Part shall be governed by applicable provisions of the International Radio Regulations and the applicable radio provisions of all other international agreements in force to which the United States is a party.

§ 7.172 *Cooperative use of frequency assignments.* Unless provided otherwise, by applicable provisions of the International Radio Regulations,[1] by this part, or by the particular station authorization, each radio-channel authorized for use by a station subject to this part is available for such use on a shared basis only and shall not be construed as available for the exclusive use of any one station or any one station licensee. All station licensees shall cooperate in the use of their respective frequency assignment in order to minimize interference and obtain the most effective use of the authorized radio-channels.

§ 7.173 *Secrecy of communication.* The station license, and the responsible radio operators, as well as all persons who may have knowledge of the text or of the existence of the radio communications transmitted or received by a land or fixed station subject to this part, or of any information whatever obtained by means of the radio-communication service of such station, shall be under the obligation of observing and insuring the secrecy of communications to the extent required by the Communications Act and the International Radio Regulations.[3]

§ 7.174 *Unauthorized transmissions.* Stations operating in the maritime mobile service or in any fixed service subject to this part shall not engage in radiocommunication which is superfluous or unnecessary in that service. Except in an emergency which requires otherwise, the transmission by such stations of signals or communications not addressed to an authorized station or stations in an authorized maritime service is prohibited unless radiotelegraphy is used and the transmission, preceded by CQ or CP in accordance with the International Radio Regulations, is intended to be intercepted by authorized stations of the maritime mobile service.

§ 7.175 *Suspension of transmission.* Transmission shall be suspended immediately upon detection or notification of a deviation from the technical requirements of the station authorization until such deviation is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission shall be suspended as soon as the emergency is terminated.

§ 7.176 *Service of public coast stations.* (a) Each public coast station shall, within the scope of its normal operations, be bound to exchange radiocommunication with any ship or aircraft station at sea: *Provided,* That such exchange of radiocommunication shall be without distinction as to radio systems or instruments adopted by each station.

(b) Each public coast station shall, within the scope of its normal operations and without discrimination, acknowledge all calls and receive all messages and communications from mobile stations within range which are addressed or directed to it, transmit all messages and communications delivered to or via the coast station which are addressed or directed to mobile stations within range, and in all respects, render a maritime mobile service of public correspondence without discrimination.

§ 7.177 *Service of limited coast stations and marine-utility stations.* (a) In addition to such messages as are necessary for compliance with § 7.178, and except as may be otherwise limited by the terms of this part governing the use of particular frequencies or by the terms of the station license, a limited coast station or a marine-utility station operated on shore is authorized to transmit within the scope of its normal operations messages necessary for the safe, expeditious or economical operation of ships or (when necessary) for the safety of aircraft.

§ 7.178 *General obligations of land stations.* (a) With respect to distress and the safety of navigation, life, or property, each coast station or marine-utility station shall, within the scope of its normal operation, acknowledge all such safety calls and receive all such safety communication[3] addressed or directed to it by ship or aircraft stations. Notwithstanding the terms and conditions of the station license, such stations may transmit safety communication to any ship or aircraft station in the maritime mobile service.

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[1] The term "control point" is defined by paragraph (m) of § 7.7. See also §§ 7.31 and 7.71.

[2] The term "dispatch point" is defined by paragraph (n) of § 7.7. See also §§ 7.31 and 7.71.

[1] For example, see Article 21, (C), section 7 (1) (c) of the General Radio-communication Regulations (Revision of Cairo, 1938) (Cairo 508).

[3] See sections 501, 502 and 605 of the Communications Act; also Article 21 of the International Radio Regulations, Atlantic City, 1947.

§ 7.179 *Message charges.* (a) No charge shall be made for the service of any station subject to this part, other than a public coast station. No charge shall be made by any public coast station subject to this part unless effective tariffs applicable to such service are on file with the Commission, pursuant to the requirements of section 203 of the Communications Act and Part 61 of the Commission's rules and regulations.

(b) No charge shall be made by any station in the maritime mobile service of the United States for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea.

(c) No charge shall be made by any station in the maritime mobile service of the United States for the transmission, receipt, or relay of the information concerning dangers to navigation designated in paragraph (b) of § 8.303 of Part 8 of the rules of the Commission, originating on a ship of the United States or of a foreign country.

(d) Any common carrier subject to the Communications Act may furnish reports of positions of ships at sea to newspapers of general circulation, either at a nominal charge or without charge, provided the name of such common carrier is displayed along with such ship position reports.

(e) Any common carrier subject to the Communications Act may render to any agency of the United States Government free service in connection with the preparation for the national defense. Every such carrier rendering any such free service shall make and file, in duplicate, with the Commission, on or before the 31st day of July and on or before the 31st day of January in each year, reports covering the periods of 6 months ending on the 30th day of June and the 31st day of December, respectively, next prior to said dates. These reports shall show the names of the agencies to which free service was rendered pursuant to this paragraph, the general character of the communications handled for each agency, and the charges in dollars which would have accrued to the carrier for such service rendered to each agency if charges for all such communications had been collected at the published tariff rates.

§ 7.180 *Priority of communications to be observed.* Stations in the maritime mobile service shall observe at all times the priority of communications set forth in § 7.181; in particular, all such stations shall give absolute priority to radio communications or signals relating to any ship or aircraft in distress; shall, when any distress signal or communication is anticipated or intercepted, cease all transmission on frequencies which may interfere with any station hearing such radio communication or signal of distress except when engaged in answering or aiding the ship or aircraft in distress, and shall assist the vessel or aircraft in distress, so far as possible, by complying with its instructions.

§ 7.181 *Order of priority of communications.* (a) The order of priority of radiotelegraph communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international distress signal SOS) international automatic-alarm signals for distress purposes,[4] distress messages, and distress traffic.

(2) Communications preceded by the international radiotelegraph urgency signal "XXX."

(3) Communications preceded by the international radiotelegraph safety signal "TTT."

(4) Communications relative to radio direction-finding bearings.

(5) Communications relative to the navigation and safe movement of aircraft.

(6) Communications relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(7) Government communications for which priority right has been claimed.

(8) Service communications relating to the working of the radio-communication service or to communications previously transmitted.

(9) All other communications.

(b) The order of priority of radiotelephone communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international telephone distress signal MAYDAY and the telegraphic distress signal SOS transmitted by either telegraphy or telephony), distress messages, and distress traffic.

(2) Communications preceded by the international radiotelephone urgency signal "PAN," or known to the station licensee or his agent to consist of one or more urgent messages concerning the safety of a ship, aircraft, or other mobile unit or of some person on board or within sight of the ship, aircraft, or mobile unit.

(3) Communications preceded by the international radiotelephone safety signal SECURITE, or known to the station licensee or his agent to consist of one or more messages concerning the safety of navigation or important meteorological warnings.

(4) Communications known to the station licensee or his agent to consist of one or more messages relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(5) Government communications for which priority right has been claimed.

(6) All other communications.

§ 7.182 *Control by coast station.* When communicating with a mobile station in the maritime mobile service, coast stations may, for the sole purpose of reducing or avoiding interference, expediting communication, and rendering an efficient service give instructions to the mobile station relative to the order and time of transmission, to the choice of authorized frequency, to the suspension of communication, and to the permissible type of message traffic that may be transmitted or received by the particular coast station. This provision, however, shall not apply in the event of distress, either actual or impending, except as provided, in respect to distress situations, by § 7.187 and applicable provisions of the International Radio Regulations.[5]

§ 7.183 *Prevention of interference.* (a) Before any signals or communications are transmitted on any frequency, the licensed operator attending a coast station (or in a public coast station using telephony the land-line telephone operator under the supervision of the licensed operator) shall first listen on the associated receiving frequency, and when necessary on the coast station transmitting frequency, to determine whether transmission by the coast station will interfere with communication already in progress, whenever the involved frequency or frequencies are assigned to other stations within the same interference area:[6] *Provided*, That this requirement may be waived by the Commission upon application therefor in behalf of individual coast stations which employ other effective means to avoid interference.

(b) Whenever a radiocommunication in the maritime mobile service is already in progress between two mobile stations or between a mobile station and a coast station and it appears to be interfered with by a subsequent transmission from another mobile station, the latter must cease transmitting at the first request of either of the other two, except as priority may be otherwise determined by § 7.181. The station requesting this cessation must indicate the approximate length of the wait imposed upon the mobile station whose transmission is suspended.

(c) Except in cases of distress, communications between ship stations or between ship and aircraft stations must not interfere with the work of coast stations. When this work is thus interfered with, the ship or aircraft station which causes it must stop transmitting or change frequency upon the first request of the coast station concerned.

(d) Coast stations when operating on a frequency below 3500 kilocycles or above 30 Mc. shall not carry on, or attempt to carry on, communication with any station which, under the currently prevailing conditions of transmission or reception, is not within reliable communication range of the coast station; provided, that this provision shall not apply in event of distress, either actual or impending.

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[3] Paragraph (a) of § 7.7 defines "safety communication".

[4] The international auto alarm signal intended for use primarily in radiotelegraphy consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second.

[5] See Article 37 of the International Radio Regulations, Atlantic City, 1947.

[6] For example, all stations in the Great Lakes region are considered to be in the same interference area.

§ 7.184 *Transmission of traffic lists by coast stations.* (a) Public coast stations are authorized to transmit lists of official call signs (or in the use of telephony, the names of the respective ships) of mobile stations for whom they have public correspondence awaiting transmission. The use of calling frequencies for this purpose is prohibited; however, coast stations may announce on a calling frequency (including the assigned frequency 500 kc.) that they are ready to begin transmission of such call lists on a specified radio-channel authorized for working.

(b) In operating pursuant to paragraph (a) of this section, public coast stations using telegraphy shall be governed by the applicable provisions of the International Radio Regulations.[7]

§ 7.185 *Transmission to plurality of mobile stations.* Information for the general benefit of mariners (including storm warnings and ordinary weather and hydrographic information) and press material may be transmitted by a coast station simultaneously to a plurality of mobile stations in the maritime mobile service, provided that the times at which such transmissions (except storm warnings and urgency and safety messages) are scheduled to begin, the maximum duration of each such transmission, and the specific radio-channels and class of emission used therefor, shall, with respect to each coast station, be subject to approval by the Commission.

§ 7.186 *Hours of service of land stations.* (a) Each coast station or marine-utility station on shore whose hours of service are not continuous shall not suspend operation before having concluded all communication required in connection with a distress call or distress traffic;

(b) Each public coast station whose hours of service are not continuous shall not suspend operation before having concluded all communication (in addition to that designated in paragraph (a) of this section), within the scope of its normal operations, involving messages or calls originating in or destined to mobile stations or marine fixed stations which are within normal range of the coast station and which, in the case of mobile stations, have signalled their presence before the effective suspension of operation of the coast station.

(c) Unless otherwise authorized by the Commission upon adequate showing of need therefor, each Class 1 public coast station shall maintain continuous hours of service during the entire period of validity of the station license.

(d) Unless otherwise specified by the Commission for particular stations, the hours of service of each Class II and Class III public coast stations shall, within the scope of its normal operations, be such as to adequately meet the requirements of the particular region served by the station.

(e) Unless otherwise specified by the Commission for particular stations, the hours of service of limited coast stations and marine-utility stations on shore shall be determined by the station licensee in accordance with the requirements of the respective ships served by each station.

(f) The Commission, as public interest, convenience, or necessity requires, may order, at any time, the licensee of a public coast station not authorized for continuous hours of service to increase the hours of service of such station as may, in the discretion of the Commission, be required to provide adequate public service.

§ 7.187 *Procedure relative to distress communication.* In addition to the governing provisions of International Radio Regulations[8] applicable to the transmission and interception of distress signals and the handling of distress traffic, land stations which are subject to this part shall, in cases of distress, be governed by the following paragraphs of this section.[9]

(a) *Acknowledgment of distress message.* Any station in the maritime service which receives a distress message relative to a vessel, aircraft, or other unit which is beyond any possible doubt, in the vicinity of that station, shall, when it has appropriate transmitting apparatus available, immediately acknowledge receipt. If it appears that the vessel, aircraft, or other unit in distress is not in its vicinity, a short interval of time shall elapse before the station acknowledges receipt of the distress message, in order to permit stations that may be nearer to the location of the distress to reply and acknowledge receipt without interference. All stations in the maritime service which hear a distress signal or message must cease immediately any transmission capable of interfering with the distress signal or message and shall listen on the frequency used for the distress signal and message.

(b) *Form of acknowledgment by telegraphy.* The acknowledgment of receipt of a distress signal or message is transmitted, when telegraphy is used, in the following form:

(1) Call sign of the mobile station in distress (transmitted 3 times);

(2) The signal "de";

(3) Call sign of the station acknowledging receipt (transmitted 3 times);

(4) The signal "RRR"; and

(5) The distress signal.

(c) *Control of distress traffic.* (1) The control of distress traffic is the responsibility of the mobile station in distress, or the station which has transmitted the distress call. These stations may, however, delegate the control of the distress traffic to another station.

(2) When any station has assumed control of distress traffic, it shall be responsible for maintaining silence on the distress frequency, or the frequency being used for distress traffic for all emissions except distress signals and distress traffic, and for clearing the distress frequency when the distress traffic has ceased.

(3) The station in distress or the station in control of the distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. In telegraphy, the service abbreviation "QRT" followed by the distress signal (. . . — — — . . .) is used to impose silence for this purpose.

(4) Any station engaging in radiocommunication with the mobile station in distress or with the station in control of the distress traffic may impose silence on any station which interferes with distress traffic. In telegraphy, this is indicated by using the signal "AS" (. — . . .) followed by the word "distress" and the call sign of the station imposing silence.

(5) The use of the radiotelegraph service abbreviation "QRT" followed by the distress signal (. . . — — — . . .) must be reserved, as far as possible, for the mobile station in distress and for the station controlling distress traffic.

(6) Any station which has been notified to cease transmission in connection with a situation of distress shall not resume transmission on any frequency which may cause interference to distress signals or traffic until notified by the station in control of the distress traffic that the distress traffic has ceased and transmission may be resumed, or until notified by the station issuing the original notice that transmission from the station in question will not interfere with the distress signals or traffic.

(d) *Supplemental transmissions.* (1) A coast station equipped for telegraphy and located in the general vicinity of the vessel, aircraft, or other unit in distress shall, if possible and when deemed appropriate by the licensed radiotelegraph operator on duty at that station, transmit the radiotelegraph alarm signal[10] on the frequency 500 kc using the maximum available power and class A2 emission, when—

(A) A distress call has been transmitted and was not preceded by the alarm signal; or

(B) Upon audible reception of an alarm signal which appears to be ineffective by reason of improper timing, improper class of emission, insufficient signal strength, interference, or excessive deviation from the frequency 500 kc.

(2) When a coast station has heard a distress call or distress message for which acknowledgment of receipt has not been given promptly, and when the intercepting station itself is not in a position to render assistance, it shall, subject to the discretion of the licensed operator

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[7] See Article 30, paragraph 3 of the International Radio Regulations, Atlantic City, 1947.

[8] See Article 37 of the International Radio Regulations, Atlantic City, 1947.

[9] See also Subpart J of Part 8 of the Commission's rules pertaining to mobile stations.

[10] This alarm signal consists of a series of 12 dashes transmitted in one minute, the duration of each dash being 4 seconds and the duration of the interval between 2 consecutive dashes being one second. The distress signal (. . . — — — . . .) shall be transmitted 3 times immediately after the alarm signal, in order to operate such automatic apparatus as may be designed to be actuated by the normal distress signal on 500 kc.

on duty at that station, make every effort possible to attract the attention of any station in the maritime service which appears to be in a position to render assistance. For this purpose, transmission of the distress call and distress message may be repeated, if possible on the frequency 500 kc using the maximum available power and if possible class A2 emission, and/or on such other frequency and with such other class of emission as may be deemed necessary or helpful.[11] At the same time all necessary steps shall be taken to notify the authorities who may be able to intervene usefully.

(3) A coast station which repeats a distress call or distress message shall follow it by the words "transmitted for (insert identity of mobile craft in distress) by", and thereafter its own call sign transmitted 3 times. In radiotelegraphy, the repetition of the distress call or distress message on 500 kc shall, when circumstances permit, be preceded by transmission of the 500 kc international alarm signal followed by an interval of 2 minutes.

§ 7.188 *Radiotelegraph watch by coast stations.* (a) All coast stations (public and limited) licensed to use telegraphy on frequencies within the frequency band 365 to 515 kc shall, during their hours of service, take the necessary measures to insure an efficient safety watch by a duly licensed radiotelegraph operator on the international distress frequency 500 kc for three minutes twice each hour, beginning at x h 15 and x h 45, Greenwich mean time (G. M. T.). For this purpose, either a head receiver or a loudspeaker may be used, on condition that use of the loudspeaker is not less effective than use of the head receiver. While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for example, broadcast receivers, or amateur transmitters or receivers) not actually required in connection with maritime mobile service.

(b) All public coast stations licensed to use frequencies in the authorized bands between 365 and 515 kc shall, during their hours of service, remain on watch on the calling frequency 500 kc, except when the operator is transmitting on 500 kc, operating the station transmitting or receiving equipment on any other frequency authorized for transmission or reception in the maritime mobile service (including maintenance of the watch on 143 kc if required as provided by subsection (c) hereof) if it is not possible to maintain at the same time, by any practicable means,[12] the watch for calls on 500 kc. The provisions of this section, however, shall not relieve the coast station from complying with the requirements for a safety watch as prescribed in subsection (a) hereof.

(c) On condition that compliance with the following requirement shall in no way interrupt or reduce the efficiency of the safety watch prescribed in subsection (a) hereof, each coast station equipped and licensed for communication by means of class A1 emission on frequencies within the band 100 to 160 kc shall, during its hours of service when not engaged in communication with another station of the maritime mobile service, keep watch for calls every hour on the frequency 143 kc for five minutes beginning at x h 35, Greenwich mean time (G. M. T.).

§ 7.189 *Radiotelephone watch by coast stations.* (a) Each public coast station licensed to use telephony shall, during its hours of service, keep watch on the radio-channel(s) authorized for working, which are used normally by mobile stations for transmission by telephony to the particular coast station; or in lieu of such watch, the coast station shall, during its hours of service, monitor such radio-channel(s) by any apparatus which will automatically intercept signals from mobile stations with no less efficiency than that attainable by a watch and which automatically indicates the interception of such signals by either aural or visual means.

(b) As an alternative to keeping watch on (or monitoring) the working radio-channels as prescribed by paragraph (a) of this section, a public coast station may, in the discretion of the station licensee, keep watch on (or monitor) the comparable radio-channel(s) designated for calling by telephony (assigned frequency 2182 kc, comparable to working channels within the band 1600 kc to 3500 kc; assigned frequency 156.8 Mc. comparable to working channels within the band 100 to 200 kc).

(c) If and when required by the Commission for safety purposes, a particular public coast station using telephony shall, during its hours of service, keep watch on the radio-channel(s) designated for calling by telephony (assigned frequency 2182 kc or 156.8 Mc.) or, alternatively, shall monitor such radio-channel(s) by automatic apparatus approved by the Commission for safety purposes: *Provided*, That this requirement shall not be prescribed without the consent of the station licensee unless, after hearing, the Commission shall determine that this requirement will substantially promote safety of life and property at sea.

(d) With respect to those provisions of paragraphs (a), (b) and (c) of this section pertaining to watch, the person who keeps such watch shall, in each instance, and at all times during the hours of service of the station, be a person who is authorized by the station licensee to operate, in accordance with applicable law and regulations, the appropriate radiotelephone transmitting apparatus of the particular station.

§ 7.190 *Maintenance tests.* Stations subject to this part are authorized to engage in a minimum amount of test transmissions when considered by the station licensee to be necessary for the proper maintenance of the station: *Provided*, That precautions shall be taken always to avoid, in so far as may be possible, interference to other stations: *Further, provided*, That this test transmission shall conform to such test operating procedure as is prescribed elsewhere in this part for the particular class of station involved.

§ 7.191 *Inspection of antenna tower lighting.* (a) The license of a station subject to this part which has an antenna or antenna supporting structure(s) required to be illuminated pursuant to the provisions of section 303 (q) of the Communications Act shall:

(1) Make a daily check of the tower lights not later than one hour after local sunset either by visual observation of the tower lights or by observation of an automatic indicator to insure that all such lights are functioning properly as required;

(2) Report immediately by telephone or telegraph to the nearest Airways Communication Station or office of the Civil Aeronautics Administration any observed failure of any code and/or rotating beacon light(s) if such failure(s) is (are) not corrected within 30 minutes after observation thereof, regardless of the cause of such failure. Further notification by telephone or telegraph shall be given the above station or office immediately upon resumption of the required illumination; and

(3) Inspect at intervals of at least once each 3 months all code and rotating beacon light(s) and automatic lighting control devices to insure that such apparatus is functioning properly as required.

(b) The station licensee or his representative shall make entries in the radio station log appropriate to the requirements of paragraph (a) of this section, as follows:

(1) The date and time of each day that the tower lights are turned on and off, if manually controlled;

(2) The time that the daily check of proper operation of the tower lights was made, either by visual observation of the tower lights or by observation of an automatic indicator;

(3) In the event of any observed failure of the tower lighting:

(i) Nature of such failure;

(ii) Date and time that the failure was observed;

(iii) Date, time, and nature of the adjustments, repairs, or replacements made;

(iv) Entry showing the identification of the Airways Communication Station (Civil Aeronautics Administration) which was notified of the failure of any code and/or rotating beacon light(s) not corrected within 30 minutes after observation and an entry of the date and time that such notice was given;

(v) Date and time that notice was given to the Airways Communication Station (Civil Aeronautics Administration) that the required illumination was resumed;

(4) Upon completion of the periodic inspection required by subparagraph (3) of paragraph (a) of this section:

(i) The date of the inspection and the condition of all required lights and associated lighting control devices, together with the measured voltage under normal load at a reference point in the lighting circuit and the computed voltage at each lamp socket.

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[11] In the Great Lakes region, the frequency 2182 kc may be used with class A3 emission, and additionally in other regions where its use may prove beneficial in securing assistance for the mobile unit in distress.

[12] Any practicable means of maintaining this watch would include a loudspeaker or head receiver energized, if necessary, by an additional radio receiver (other than the receiver actually in use for non-watch purposes) which is tuned to 500 kc.

(ii) Any adjustments, replacements, or repairs made to insure compliance with the lighting requirements and the date such adjustments, replacements, or repairs were made.

§ 7.192 *Maintenance of station log.* (a) Each station subject to this part which is required, under the provisions of this part pertaining to the particular class of station, to keep a radio station log, shall, in addition, comply with the applicable provisions of the following paragraphs of this section; the station licensee and the licensed radio operator (when a licensed operator is required) in charge of the station shall be responsible for compliance with this section;

(b) The log shall be kept in an orderly manner, in useable form, and in such detail that the information required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if their proper meaning or explanation is contained elsewhere in the same log.

(c) The station log or any portion thereof shall not be erased, obliterated, or wilfully destroyed within the period of retention required by § 7.115. However, during this period any necessary correction may be made of such log but only by the person originating the entry and that person shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

SUBPART H—COAST STATIONS: USE OF TELEGRAPHY

§ 7.201 *Supplemental eligibility requirements for public coast station authorization.* (a) Subject to the basic eligibility requirements set forth in § 7.23, an authorization for a public coast station may be granted to any person, or state or local government subdivision, or any agency of the Federal government which is subject to the provisions of section 301 of the Communications Act, provided the applicant is—

(1) Qualified as a common carrier of communications; *or*

(2) Qualified to provide a radio service of public correspondence, without discrimination and without charge of any kind therefor.

§ 7.202 *Points of communication of public coast stations.* (a) Public coast stations using telegraphy are authorized to communicate normally with the classes of stations designated herewith, subject to the conditions and limitations imposed by the terms of the particular coast station license or by the applicable provisions of this part with respect to the use of particular radio-channels:

(1) On the radio-channel of which 500 kc is the authorized carrier frequency, with any ship station or any aircraft station using telegraphy other than for the transmission of public correspondence;

(2) With public ship stations licensed by the Commission and using telegraphy on a frequency assignment designated in Part 8 of the Commission's rules for use by public ship stations.

(3) With ship stations of the United States government (other than limited ship stations subject to section 301 of the Communications Act) using telegraphy on a government frequency assignment or on a frequency assignment designated in Part 8 of the Commission's rules for use by public ship stations;

(4) With ship stations of any foreign country using telegraphy on an appropriate frequency assignment designated in Part 8 of the Commission's rules for use by public ship stations or available in accordance with the International Radio Regulations for ship to shore transmission of public correspondence by telegraphy;

(5) With aeronautical public service stations and United States government stations on board aircraft in flight, using telegraphy on a frequency assignment available for public correspondence as expressed in subparagraphs (2), (3), and (4) of this paragraph (provided neither harmful interference nor intolerable delay is caused to communication with ship stations).

(b) Upon application, a public coast station using telegraphy may be authorized to transmit press material, and meteorological and marine navigational information of benefit to mariners, additionally to designated fixed locations, whenever the same information is transmitted by such coast station simultaneously and primarily to ship stations; provided, a sufficient need for such authorization is shown to exist.

(c) Each public coast station using telegraphy is authorized to communicate additionally with other public coast stations using telegraphy when such communication is necessary to facilitate the disposal of message traffic (public correspondence or safety communication) destined to or originated at mobile stations (public ship stations or aeronautical public service stations aboard aircraft) subject to and in accordance with the express conditions hereinafter set forth:

(1) For the interchange of operating signals, brief service messages or safety communication;

(2) For the transmission or receipt of message traffic destined to a mobile station which, by reason of its known or reported geographic location at the time, can be communicated with more effectively or more expeditiously by the coast station which receives such message traffic for relay to the mobile station: *Provided, however,* That this procedure shall not be used for normal routing of radio traffic, but only when the coast station initially concerned is unable to communicate in an effective manner directly with such mobile station;

(3) For the transmission or receipt of message traffic, which originated at a mobile station, by a public coast station in the Great Lakes region exclusively, when the use of available point-to-point communication facilities would unduly delay the delivery of such message traffic to the addressee(s).

(4) Such communication as is permissible under subparagraphs (2) and (3) of this paragraph shall be conducted only in exceptional circumstances and with discretion, without incurring additional charges: *Provided,* Such utilization of radiotelegraphy shall not in any way replace or be used in lieu of point-to-point communication facilities which are available for the forwarding of message traffic to and from the particular coast stations involved;

(5) Only radio channels authorized for working with ship stations (and used primarily for that purpose) shall be employed for this communication between coast stations and, in so far as may be practicable, only authorized frequencies within the band 415 kc to 5000 kc shall be used;

(6) All communication engaged in under the provisions of this paragraph shall be confined exclusively to that which is actually required to facilitate the transmission or reception of ship-shore public correspondence or to enhance safety at sea;

(7) Neither harmful interference nor intolerable delay shall be caused to communication between mobile stations and land stations, or to communication between mobile stations.

§ 7.203 *Supplemental eligibility requirements for limited coast station authorization.* (a) Subject to the statutory eligibility requirements set forth in § 7.23, an authorization for a limited coast station using telegraphy may be granted to any person, or state or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act provided the applicant is—

(1) Regularly engaged in performing a service for one or more governmental agencies; or

(2) An organization of which all persons who are members or shareholders are regularly engaged in performing a service for one or more governmental agencies; or

(3) A non-profit corporation or association, organized for the purpose of furnishing a maritime mobile service solely to persons who are regularly engaged in performing a service for one or more governmental agencies.

(b) Each application for station authorization for a limited coast station shall be accompanied by a written statement in detail sufficient to indicate clearly the applicant's eligibility under paragraph (a) of this section.

§ 7.204 *Points of communication of limited coast stations.* (a) Limited coast stations using telegraphy are authorized to communicate normally with the categories of ship stations designated herewith, subject to the conditions and limitations imposed by the terms of their particular station licenses or by the applicable provisions of this part with respect to the use of particular radiochannels:

(1) Any ship station using telegraphy on the assigned frequency 500 kc;

(2) Specified limited ship stations licensed by the Commission and using telegraphy on a frequency assignment designated for this purpose;

(3) Specified public ship stations licensed by the Commission and using telegraphy on a frequency assignment designated for this purpose;

(b) With respect to the terms of paragraphs (a) (2) and (a) (3) of this section, the specific ship stations with which a limited coast station is authorized to communicate shall be designated appropriately in the license of such coast station.

§ 7.205 *Nature of service of limited coast stations.* (a) Limited coast stations using telegraphy shall—

(1) Not be open to public correspondence;

(2) Not be used to render a communications common carrier service;

(3) Not be used for the transmission of press material or news items which are not required to serve a governmental purpose.

(4) Be used exclusively to serve governmental purposes including the transmission of safety communication.[1]

(b) In areas where adequate and appropriate weather and hydrographic information is transmitted by means of telegraphy through the medium of one or more public coast stations or United States government stations, limited coast stations shall not duplicate that service. In all other respects, limited coast stations may transmit by means of telegraphy such weather and hydrographic information as is required for the ships with which they normally communicate.

§ 7.206 *Assignable frequencies.* (a) Each of the specific frequencies in kilocycles hereinafter designated in this subsection may be licensed as an assigned frequency[2] for use by coast stations (public or limited) employing telegraphy subject to and in accordance with the provisions of paragraph (b) of this section and Subpart E of this part: *Provided,* That the use of each of these frequencies may be restricted by the Commission to specific areas or locations in order to avoid or minimize interference between stations: *Further provided,* That frequencies below 150 kc and above 5000 kc are assignable to Class 1 coast stations only:

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[3] 448
[3] 452
[3] 454
[3] 460
[3] 462
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472
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476
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482
484
500
calling
only
[3] 2274
[3] 3030
4140
calling
4462.5
4705
4780
4785
4790
5520
calling
5540
5545
5550
5555
5560
5565
6210
calling
6250
6260
6270
6280
6290
6300

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6410
6440
6450
8280
calling
8350
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8390
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8680
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11145
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11175
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calling
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12720
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12750
13050
13065
13080
13170
16560
calling
16670
16700
16720
16740
16760
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21975
22080
calling
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(b) (1) The frequency 410 kc shall not be used to communicate with ship stations on the Great Lakes or on inland waters; further, the use of this frequency for communication between coast stations pursuant to paragraph (c) of § 7.202 is authorized only for coast stations located on or near the seacoast which serve primarily ships at sea.

(2) In consideration of the fact that the frequency 455 kc is widely used as a standard intermediate frequency for the superheterodyne type of radio receiver, applications requesting assignment of one or more of the frequencies 448, 452, 454, 460, and 462 kc will be considered in relation to the possibility of general interference with the operation of receiving equipment of this type.

(3) The frequency 2274 kc is authorized for use in communicating with ship stations on the Great Lakes or on inland waters exclusively, upon the express condition that interference shall not be caused to stations of Canada.

(4) The frequency 3030 kc is authorized solely for use by coast stations located in the vicinity of the Mississippi River and connecting inland waters (other than the Great Lakes), upon the express condition that interference shall not be caused to stations of Canada.

(5) The frequencies 8570, 8580, 11295, and 11310 kc are authorized for use by coast stations upon the express condition that interference shall not be caused to intercontinental aeronautical services.

§ 7.207 *Frequencies for calling.* (a) The general international calling frequency is 500 kc; the radio-channel of which this frequency is the assigned frequency shall be appropriately used by any coast station engaged in radiotelegraphy in the authorized bands between 365 and 515 kc. The radio-channel for replying to a call sent on the general calling channel (500 kc assigned frequency) is the same channel as that used for the call. A coast station, however, may reply to calls by transmitting on a working frequency, when a mobile station requests the use of this procedure. (In Region 2, and in other areas of heavy radiotelegraph traffic in this band, ship stations normally request coast stations to answer by means of their normal working channel.) In order to facilitate the reception of distress calls, all stations using the radio-channel of which 500 kc is the assigned frequency shall reduce to the minimum their transmissions on this channel.

(b) The frequency 143 kc is the international calling frequency in the maritime mobile service in the band 100 to 160 kc (class A1 emission only). (When a ship station which uses frequencies within the band 100 to 160 kc desires to establish communication with a coast station, it normally calls that station on the frequency 143 kc, unless the International List of Coast and Ship Stations provides otherwise).[4] This frequency is authorized to be used exclusively for individual calls and replies to such calls and for the transmission of signals preparatory to traffic.

(c) The radio-channels of which the frequencies between 4,000 kc and 23,000 kc, designated for "calling" in paragraph (a) of § 7.206, are the assigned frequencies shall be used primarily for calling and answering; with the exception of 8280 kc they may be used otherwise on a secondary basis only as provided by paragraph (e) of § 7.208.

(d) In addition to the radio-channels of which the assigned frequencies are specifically authorized herein for "calling", all radio-channels within the band 4,000 to 23,000 kc similarly authorized for working may be used for calling also, provided interference is not caused to any communication in progress on the particular working channel.

§ 7.208 *Frequencies for working.* (a) Each assigned frequency listed in paragraph (a) of § 7.206, and which is not identified therein with a specific use or function, is authorized as an assigned frequency for "working".

(b) The calling channel of which 500 kc is the assigned frequency may be used for the transmission of distress, urgency, and safety messages; any other use of this channel for working is prohibited.

(c) In so far as is practicable, coast stations shall use frequency-assignments within the high frequency band (3,000 to 23,000 kc) only when other frequency-assignments will not provide effective communication.

(d) In addition to the frequency-assignment designated for telegraphy in the license of a ship station, such station, when working by means of telegraphy with a coast station, may, on condition that its emission-bandwith and frequency-tolerance shall be within the respective limits thereof permitted for the coast station, transmit—

(1) On a telegraph working channel of a coast station within the band 110 to 194 kc when directed to do so by the

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[1] See paragraph (a) of § 7.7 which defines "safety communication".

[2] The definition of "assigned frequency" is set forth in paragraph (u) of § 7.8.

[3] Subject to the special conditions and limitations set forth in paragraph (b) of § 7.206.

[4] Coast stations reply on their normal working frequency in this band.

coast station for which the channel is authorized; provided, interference is not caused to the service of any land, fixed, broadcast, or radiolocation station; and provided, that the emission shall be class A1 only.

(2) On a telegraph working channel of a coast station within the bands 385 to 435 kc and 4,000 kc to 23,000 kc when directed to do so by the coast station for which the channel is authorized.

(3) Coast stations are authorized to direct ship stations to operate in accordance with the provisions of this section, whenever such means of operation is possible and appropriate.

(e) In addition to the radio-channels of which the assigned frequencies are designated by paragraph (a) of this section "working", the radio-channels within the band 4,000 kc to 23,000 kc (except 8,280 kc) of which the assigned frequencies are designated in paragraph (a) of § 7.206 for "calling" may be used, additionally and with discretion, for working; on condition that interference shall not result to calling, answering, and the exchange of operating signals on the same channel.

§ 7.209 *Use of Morse code required.* (a) The signal code employed for telegraphy by stations in the maritime mobile service shall be the Morse code signals specified in the Telegraph Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947). However, the radiotelegraph communication of a special character, the use of other signals may be specifically authorized by the Commission in response to an appropriate application therefor.

§ 7.210 *Identification of stations.* (a) All radiotelegraph emissions of a coast station shall be clearly identified by transmission therefrom of the official call letters assigned to that station for telegraphy by the Commission. These call letters shall be transmitted by telegraphy in accordance with § 7.209 and the procedure set forth in the International Radio Regulations, and by means of the class of emission normally used by the station for telegraphy: *Provided*, They shall be transmitted always upon completion of any transmission when the station resumes its watch or suspends transmission for an indefinite time; in addition they shall be transmitted at intervals not exceeding 15 minutes whenever transmission is sustained for a period exceeding 15 minutes.

§ 7.211 *Procedure in testing.* (a) Coast stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelegraph testing procedure described below shall be followed.

(1) The licensed radiotelegraph operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The operator shall transmit the signal "IE" (two dots, space, one dot) on the test frequency as a warning that test emissions are about to be made on that frequency. When the frequency or frequencies of the test emissions is/are within the frequency band 365–515 kc, a listening watch shall be maintained on 500 kc by a licensed radiotelegraph operator at the station throughout the test period.

(3) If, as a result of transmitting the test signal "IE", any station indicates, by transmitting the signal "AS" (wait), that it anticipates harmful interference, testing shall be suspended. When transmission of "IE" is resumed and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in (4);

(4) Test signals composed of a series of "VVV" followed by the call sign of the testing station shall be transmitted. The call sign shall be sent clearly and at relatively slow speed.

(b) When testing is conducted on the frequency 500 kc, the test signals shall not continue for more than 10 seconds, and no tests shall be conducted during the 500 kc silent periods. Care must be exercised not to so prolong and space the dash portion of the "VVV" series as to form the alarm signal.

§ 7.212 *Radiotelegraph operating procedure.* (a) Except for the transmission of distress or urgency signals, all transmissions by coast stations must cease within the band 480 to 520 kc during each 500 kc silent period, i. e., for three minutes twice an hour beginning at x h 15 and x h 45, Greenwich mean time (G. M. T.).

(b) In order to facilitate radiotelegraph communication in the maritime mobile service, all coast stations transmitting by means of telegraphy shall, whenever practicable, use the service abbreviations ("Q" signals) listed in Appendix 9 of the International Radio Regulations (Atlantic City, 1947).

(c) In addition to compliance with all applicable sections of this Part, the operation of coast stations using telegraphy for call, reply, and the transmission of message traffic shall, in particular, comply with all applicable provisions of Articles 29 (except subparagraph (2) of paragraph 8 thereof), 30, 31, 32, 38, 39, and 40 of the International Radio Regulations (Atlantic City, 1947).

§ 7.213 *Station documents.* (a) All public coast stations using telegraphy shall be provided with the following documents:

(1) A valid station license.

(2) The necessary operator license or licenses.

(3) The station log required by this Part.

(4) The Alphabetical List of Call Signs prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(5) The List of Coast Stations and Ship Stations prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(6) The List of Stations performing Special Services prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(7) The General Radiocommunication Regulations (Revision of Cairo, 1938), and such provisions of the International Telecommunication Convention (Madrid, 1932) as are necessary for the operation of the radiocommunication service rendered by the coast station.

(8) Such provisions of the International Radio Regulations (Atlantic City, 1947), including Articles 29, 30, 31, 32, 35, 37, 38, 39, 40, and 41, as are necessary for the operation of the radiocommunication service rendered by the coast station.

(9) Parts 7 and 8 of the rules of the Commission.

(b) All limited coast stations using telegraphy shall be provided with the documents prescribed by subparagraphs (1), (2), (3), (7), (8), and (10) of paragraph (a) of this section.

(c) These documents shall be continuously and readily available to the licensed operator on duty during the hours of service of the station.

§ 7.214 *Station records.* (a) Public coast stations using telegraphy shall maintain an accurate radiotelegraph log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The date and time of making an entry shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (GMT),[4] except that in the Great Lakes region, the time shall be expressed in eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock, beginning at midnight), and for coast stations which communicate exclusively with vessels on inland waters of the United States (other than the Great Lakes) the time shall be expressed in local standard time (e. s. t., c. s. t., etc., counted from 00:00 to 24:00 o'clock, beginning at midnight). The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "GMT" (e. s. t. in the Great Lakes area) (e. s. t., c. s. t., etc., for stations serving inland waters exclusively) shall be marked at the head of the column in which the time is entered.

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[4] For example, 8:01 p. m. eastern standard time should be entered as 0101 GMT; 8:30 a. m. eastern standard time should be entered as 1330 GMT; 7:45 p. m. eastern standard time should be entered as 0045 GMT.

(4) With respect to coast stations which, by reason of the provisions of Subpart G of this part, are required to maintain a watch on the radio-channel designated for radiotelegraph calling and distress (assigned frequency 500 kc), entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering, and exchanging operating signals and safety communications on this radio-channel. In respect to coast stations which, under applicable provisions of Subpart G of this part are required to maintain a watch on 500 kc during the 500 kc silent periods, a positive entry shall be made in respect to each such silent period, stating whether or not signals were received during that time and, if signals are received, entry shall be made of the call sign(s) of the station(s) heard and the time(s) of such reception. The use of a rubber stamp or equivalent device for making entries to show observation of the silent period is prohibited. Further, in respect to coast stations which, under applicable provisions of Subpart G of this part, are required to maintain a watch on 500 kc during their hours of service (i. e. not limited solely to the 500 kc silent periods), a positive entry shall be made at least once in each 15 minutes stating whether or not signals were received on this radio-channel (assigned frequency 500 kc) and, if signals are received, entry shall be made of the call sign(s) of the station(s) heard and the time(s) of such reception.

(5) All distress calls, alarm signals, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio-channels on which such signals or messages were transmitted or received, and the position of any ship or other mobile unit in need of assistance, if this can be determined.

(6) All calls transmitted from or received by the coast station, together with a brief notation of any messages transmitted or received, shall be entered, showing the respective times, official call signs of the mobile or land stations communicated with, and the assigned frequency(s) on which the operations occurred.

(7) Whenever harmful interference is experienced by or reported to the responsible operator an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(8) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(9) A daily entry shall be made regarding comparison of the time indicated by the required clock(s) with standard time, including a statement of any deviations observed and corrections made.

(10) Failure of apparatus to operate as required, failure of power supply, and incidents tending to unduly delay communication shall be entered.

(11) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the assigned frequency(s) as may be observed, and a statement of any corrective action taken.

(12) Entries shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and class, serial number, and expiration date of his license.

(13) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this Part.

(b) Limited coast stations using telegraphy shall maintain an accurate radiotelegraph log, during their hours of service, in the same manner and to the same extent as is required by paragraph (a) of this section for public coast stations using telegraphy: *Provided, however,* That the entries specified by subparagraphs (6) and (10) thereof shall not be required for limited coast stations.

SUBPART I—PUBLIC COAST STATIONS: USE OF TELEPHONY

§ 7.301 *Supplemental eligibility requirements.* (a) Subject to the basic eligibility requirements set forth in § 7.23, an authorization for a public coast station may be granted to any person, or State or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act of 1934, as amended, provided the applicant is—

(1) Qualified as a common carrier of communications; or

(2) Qualified to provide a radio service of public correspondence, without discrimination and without charge of any kind therefor.

§ 7.302 *Points of communication.* (a) Public coast stations using telephony are authorized to communicate normally with the classes of stations designated herewith, subject to the conditions and limitations imposed by the terms of the particular coast station license or by the applicable provisions of this part with respect to the use of particular radio-channels:

(1) On the radio-channels of which 2182 kc and 156.8 Mc are the authorized carrier frequencies; with any ship station (and on 2182 kc with any aircraft station) using telephony other than for the transmission of public correspondence;

(2) With public ship stations licensed by the Commission and using telephony on a frequency assignment designated in Part 8 of the Commission's rules for ship-shore public correspondence;

(3) With ship stations of the United States Government (other than limited ship stations subject to section 301 of the Communications Act) using telephony on a Government frequency assignment or on a frequency assignment designated in Part 8 of the Commission's rules for ship-shore public correspondence;

(4) With ship stations of any foreign country using telephony on an appropriate frequency assignment designated in Part 8 of the Commission's rules for ship-shore public correspondence or available in accordance with the International Radio Regulations for ship to shore transmission of public correspondence by telephony;

(5) With aeronautical public service stations and United States Government stations on board aircraft in flight using telephony on a frequency assignment (below 30 Mc) available for ship-shore public correspondence as expressed in subparagraphs (2), (3), and (4) of this paragraph (provided neither harmful interference nor intolerable delay is caused to communication with ship stations);

(6) With marine fixed stations when the coast station uses for this purpose a frequency assignment below 4000 kc (this authority applies solely to public coast stations providing direct connection with a public land-line telephone system and upon the express condition that neither harmful interference nor intolerable delay is caused to communication with ship stations).

(b) Additionally, when necessary to expedite communication with a ship station using telephony on a frequency assignment above 100 Mc, public coast stations may communicate on the assigned frequency 156.8 Mc with other coast stations (public, limited, or Government) for the exchange of operating signals, brief service messages, and emergency messages; on condition that such communication shall not interfere with calls from or to mobile stations.

(c) Upon application, a public coast station using telephony may be specifically authorized by the terms of its station authorization to communicate with a designated station (Government or non-Government) at a remote fixed location isolated from the mainland where other communication facilities are not available: *Provided,*

(1) The station with which communication is carried on is duly authorized to communicate with the particular coast station involved; and

(2) The station with which communication is carried on shall transmit by telephony to the coast station on a frequency assignment available for ship-shore public correspondence in accordance with the provisions of Part 8 of the Commission's Rules for public ship stations using telephony; and

(3) Any communication carried on shall be confined exclusively to that absolutely necessary for public safety or the protection of life or property; and

(4) Neither harmful interference nor intolerable delay is caused to safety communication with ship stations.

(d) Upon application, a public coast station using telephony may be authorized to transmit meteorological and marine navigational information, of benefit to mariners, additionally to designated fixed locations, whenever the same information is transmitted by such coast station simultaneously and primarily to ship stations; *Provided*, A sufficient need for such authorization is shown to exist.

§ 7.303 *Duplication of facilities.* A public coast station shall not be authorized in behalf of any person or government agency who applies for construction permit or station license to provide a maritime mobile service by the use of any frequency assignment above 100 Mc to any geographic area which is being, or is to be, adequately served by the use of any frequency assignment above 100 Mc by a public coast station or stations already authorized by the Commission in behalf of a different person or government agency, unless the Commission shall, in individual cases under exceptional circumstances, determine that the public interest, convenience, or necessity would be served by the grant of such construction permit or license.

§ 7.304 *Assignable frequencies.* (a) Each of the specific frequencies in kilocycles hereinafter designated in this subsection may be licensed as an authorized carrier frequency [1] for use by public coast stations employing telephony by means of amplitude modulation subject to and in accordance with paragraph (d) of this section, other applicable sections of this subpart, and Subpart E of this part:

2,182
2,506
2,514
2,522
2,530
2,538
2,550
2,558
2,566
2,572
2,582
2,590
2,598
2,782
4,162.5
4,177.5
4,272.5
4,280
4,282.5
4,287.5
4,752.5
6,240
6,455
6,460
6,470
6,480
8,540
8,550
8,585
8,630
8,660
8,840
11,090
12,810
12,840
17,080
17,090
17,100
17,120
21,890
22,675
22,700

(b) Each of the specific frequencies in megacycles hereinafter designated in this subsection may be licensed as an authorized carrier frequency for use by public coast stations employing telephony by means of frequency modulation subject to and in accordance with the provisions of other applicable sections of this subpart and Subpart E of this part:

156.8 156.4 161.9 162.0

(c) (1) The following specific frequencies may be licensed as authorized carrier frequencies for use by those public coast stations using telephony which, prior to September 1, 1950, were authorized to use the respective frequency set forth below:

Carrier frequency:	*Authorized for public coast station(s) in vicinity of—*
35.14 Mc	Philadelphia, Pa.
35.18 Mc	Great Lakes region.

(2) The stations authorized to transmit on the radio-channel of which either 35.14 Mc or 35.18 Mc is the authorized carrier frequency, may employ either frequency modulation or amplitude modulation. Each of these carrier frequencies is available for use on a shared basis with limited coast stations, ship stations, marine-utility stations, and aircraft stations operating in the maritime mobile service at any location on the same radio-channel; they are not available exclusively for public correspondence. Licensees having authority to transmit on these frequencies shall cooperate in the use thereof in order to minimize interference.

(3) Applicants for public coast station authorization, or modification or renewal of station authorization, whose applications request authority to transmit on 35.14 or 35.18 Mc may be required, in the discretion of the Commission, to show a need for the use of such frequencies for public correspondence in lieu of the specific frequencies above 156 Mc authorized in this Subpart for public correspondence exclusively.

(d) Assignment of the specific carrier frequencies designated in paragraphs (a) and (b) of this section and use of frequency assignments of which those frequencies are the authorized carrier frequencies shall be subject to the express limitations and conditions hereinafter set forth in this paragraph.

(1) The frequency 2182 kc is the radiotelephone calling and distress frequency for the maritime mobile service of the United States. This frequency is authorized for use primarily by ship stations and secondarily by coast stations employing telephony, on a shared basis with stations of other countries; *Provided, however*, That its use for purposes other than distress shall not cause interference to stations of the maritime mobile service within 300 nautical miles of Charleston, South Carolina, Jacksonville, Florida, or Wilmington, California, or within 600 nautical miles of Vancouver, British Columbia, which, for a temporary period, continue in accordance with their respective station authorizations to use this frequency, or other frequencies within the band 2170 kc to 2194 kc, for working.

(2) The frequencies 2530, 2538, 2558, and 2598 kc are authorized for use upon the express condition that interference shall not be caused to the service of any station of Canada.

(3) The frequencies 2514, 2522, 2550,[2] 2572, and 2582 kc are authorized for use upon a shared basis with stations of Canada, provided that stations of the United States shall not cause interference to stations of Canada in the Great Lakes area which operate on the frequency 2582 kc.[3]

(4) The frequency 2782 kc is authorized for use by coast stations serving vessels on the Mississippi River and connecting inland waters only (except the Great Lakes); such use of this frequency is subject to coordination with stations operating in the fixed service at other locations in the United States, in order that interference shall be avoided or reduced to a minimum.

(5) The frequency 4162.5 kc is authorized for use by coast stations serving vessels on the Mississippi River and connecting inland waters only (except the Great Lakes); such use of this frequency is authorized upon the express condition that interference shall not be caused to the service of any station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused.

(6) The frequency 4272.5 kc is authorized for use upon the express condition that interference shall not be caused to the service of any station of Canada.

(7) In the Great Lakes region, the frequencies 4282.5, 6470, and 8585 kc are authorized for use upon the express condition that interference shall not be caused to the service of any station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused.

(8) The frequencies 6,240, 6,455, and 11,090 kc are authorized for use by coast stations serving vessels on the Mississippi River and connecting inland waters only (except the Great Lakes), upon the express condition that interference shall not be caused to the service of any station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused. In order to avoid such interference, transmission on these frequencies during the period from two hours after local sunset until two hours before local sunrise is prohibited.

(9) Use of the frequency 8840 kc by coast stations serving vessels on the Mississippi River and connecting inland waters (except the Great Lakes) is authorized upon the express condition that interference shall not be caused to the service of any station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused. In order to avoid such interference, transmission on this frequency for this purpose during the period from two hours after local sunset until two hours before local sunrise is prohibited.

(10) Use of the frequencies 8540 kc and 8550 kc is authorized upon the express condition that interference shall not be caused to the intercontinental aeronautical services.

(11) Use of the frequency 156.4 Mc for public correspondence is authorized for public coast stations located within 75 statute miles of Chicago, Illinois, only.

§ 7.305 *Frequencies for calling and distress.* (a) The general radiotelephone calling and distress frequency for the maritime mobile service of the United States [4] is 2182 kc; it may be used as a carrier frequency for these purposes by public coast stations subject to the following conditions and limitations:

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[1] The definition of "authorized carrier frequency" is set forth in paragraph (1) of § 7.8.

[2] In practice, stations of Canada in the Great Lakes area do not operate on the frequency 2550 kc.

[3] In practice in the Great Lakes region, coast stations of Canada equipped to do so transmit on 2550 kc to ships of the United States only; coast stations of the United States transmit on 2582 kc to ship stations of Canada only.

[4] The frequency 2182 kc will be formally recognized as the international radio-telephone distress and calling frequency in Region 2 not later than the date on which Article 3 of the Inter-American Radio Agreement, Washington, 1949, becomes effective, and in Regions 1, 2, and 3 (world-wide) not later than the date on which the new International Frequency List becomes effective as provided by Article 47 of the International Radio Regulations, Atlantic City, 1947.

(1) Aside from transmissions relative to distress as provided in Subpart G of this part, this frequency may be used for urgency and safety signals and for urgency messages (other than public correspondence);

(2) This frequency is authorized for call and reply only when the use of a different carrier frequency for this function appears to be impracticable by reason of the operating or equipment limitations of a mobile station.

(3) In addition, this frequency may be used to announce transmissions, to be made soon thereafter on other frequencies by the same coast station, when the transmissions which are to follow on other frequencies are of general interest to ships, including ordinary weather and hydrographic information; or lists of ship stations with whom the coast station desires to communicate.

(4) The use of this frequency for purposes other than distress within 300 nautical miles of Charleston, South Carolina, Jacksonville, Florida, or Wilmington, California, or within 600 nautical miles of Vancouver, British Columbia, shall not cause interference to stations of the maritime mobile service which, for a temporary period, continue in accordance with their respective station authorizations to use this frequency, or other frequencies within the band 2170 kc to 2194 kc inclusive, for working.

(b) The radiotelephone frequency for call and reply for the maritime mobile service of the United States using frequencies within the band 156.25 Mc to 162.05 Mc is 156.8 Mc. It may be used by public coast stations as prescribed in § 7.309.

(c) In addition to the radio-channels of which the carrier frequencies are specifically authorized herein for "calling", the radio-channels authorized in this Subpart for "working" may be used for call and reply, provided interference is not caused to any communication in progress on the particular working channel.

§ 7.306 *Availability of frequencies below 30 Mc.* (a) The carrier frequencies designated herewith are assignable to Class I public coast stations using telephony when the coast station and the mobile station transmit alternately on different radio channels: *Provided*, That the designated carrier frequencies below 5000 kc are assignable only to coast stations located in the vicinity of the specific harbors, ports, or places designated hereinafter opposite the respective coast station transmitting frequency: *Provided further*, That the coast station shall receive transmission from mobile stations on the associated receiving frequency below 5000 kc also designated herewith:

(1) Working frequencies below 5000 kc:

Coast station transmitting carrier frequency [1]	Coast station located in vicinity of—	Coast station receiving carrier frequency
2506 kc	San Francisco, Calif	2110 kc.
2530 kc	Hawaiian Islands	2134 kc.
2590 kc	New York, N. Y	2198 kc.
4177.5 kc	do Hawaiian Islands	4412.5 kc. 4402.5 kc.
4280 kc	San Francisco, Calif	4422.5 kc.
4752.5 kc	New York, N. Y	4457.5 kc.

[1] These frequencies are those which may be specified applications for coast station authorizations.

(2) Working frequencies between 5000 kc and 30 Mc:

6,460	8,550	12,840	17,120
6,470	8,630	17,080	21,890
6,480	8,660	17,090	22,675
8,540	12,810	17,100	22,700

(b) The carrier frequencies designated herewith are assignable for working purposes to Class II public coast stations using telephony when the coast station and the mobile station transmit alternately on different radio channels: *Provided*, That these frequencies are assignable only to coast stations located in the vicinity of the specific harbors, ports, or places designated hereinafter opposite the respective coast station transmitting frequency: *Provided further*, That the coast station shall receive transmission from mobile stations on the associated receiving frequency also designated herewith:

Coast station transmitting carrier frequency [1]	Coast station located in vicinity of—	Coast station receiving carrier frequency
2506 kc	Boston, Mass. San Francisco, Calif Eureka, Calif	2110 kc.
2514 kc	Miami, Fla Great Lakes area	2118 kc.
2522 kc	Seattle, Wash New York, N. Y	2126 kc.
2530 kc	Galveston, Tex Hawaiian Islands San Juan, P. R	2134 kc.
2538 kc	Norfolk, Va Quantico, Va	2142 kc.
2550 kc	Tampa, Fla Great Lakes area	2158 kc.
2558 kc	Wilmington, Del New York, N. Y	2166 kc.
2566 kc	Charleston, S. C Jacksonville, Fla Los Angeles, Calif	2174 kc.
2582 kc	Great Lakes area Hawaiian Islands	2206 kc.[2] 2198 kc.
2590 kc	New York, N. Y	2198 kc.
2598 kc	New Orleans, La Portland, Oreg Astoria, Oreg	2206 kc.
4177.5 kc	Boston, Mass New York, N. Y Hawaiian Islands	4412.5 kc. 4412.5 kc. 4402.5 kc.
4280 kc	San Francisco, Calif Los Angeles, Calif	4422.5 kc.
4282.5 kc	Great Lakes area	4422.5 kc.
4287.5 kc	Miami, Fla	4402.5 kc.
4752.5 kc	New York, N. Y	4457.5 kc.
6470 kc	Great Lakes area	6660 kc.
8585 kc	do	8820 kc.

[1] These frequencies are those which may be specified in applications for coast station authorizations.

[2] For reception from ship stations of Canada only.

The carrier frequency 2582 kc is assignable to public coast stations in the Great Lakes area for transmission to ship stations of Canada only.

In addition to the foregoing frequencies below 30 Mc., the frequencies 2572 kc and 4272.5 kc are assignable as carrier frequencies for telephony to Class II public coast stations at locations where their use will not cause interference to the service of any station which in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused. Further, use of the carrier frequency 4272.5 kc shall not cause interference to the service of any station of Canada.

(c) The carrier frequencies designated herewith are assignable for working purposes to Class II public coast stations using telephony and serving vessels on the Mississippi River and connecting inland waters (other than the Great Lakes); when the coast station and the mobile station transmit alternately on the same radio-channel:

2,782 kc	6,240 kc	8,840 kc
4,162.5 kc	6,455 kc	11,090 kc

(d) The use of the working frequencies authorized in paragraphs (a), (b), and (c) of this section is subject to the applicable conditions and limitations set forth in paragraph (d) of § 7.304. Further, and in so far as is practicable, Class II coast stations shall use frequency assignments within the band 4000 kc to 30 Mc only when the use of frequency assignments outside this band will not provide effective communication.

§ 7.307 *Availability of frequencies above 100 Mc.* (a) Carrier frequencies which are assignable for use by public coast stations employing frequency modulation for telephony are designated herewith (these frequency assignments are not authorized for use in communicating with aeronautical public service stations on board aircraft):

(1) For transmission and reception on the same radio-channel:

156.8 Mc for calling and safety purposes;

157.1 Mc for working at locations where use of the normally assignable carrier frequency 162 Mc would cause harmful interference to United States government stations using frequencies in the government frequency-band 162-174 Mc; or for working at locations where interference is not caused to the use of this frequency for reception from ship stations as contemplated under subparagraph (2) of this paragraph;

157.4 Mc for working at locations where interference is not caused to the use of this frequency for reception from ship stations as contemplated under subparagraph (2) of this paragraph.

(2) For transmission on one radio-channel and associated reception on a different radio-channel:

For transmission:	For reception (*Mc*)
161.9 Mc (except within 75 statute miles of Chicago, Ill.)	157.4
156.4 Mc (within 75 statute miles of Chicago, Ill., only)	157.4
162 Mc (subject to paragraph (d) of this section)	157.1

Each of these assignable frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee.

(b) Subject to the provisions of § 7.308, the carrier frequency 161.9 Mc may be authorized for use by public coast stations using telephony at any location except Chicago, Illinois, and locations within 75 statute miles thereof.

(c) Subject to the provisions of § 7.308, the carrier frequency 156.4 Mc may be authorized for use by public coast stations employing telephony, in lieu of the carrier frequency 161.9 Mc, at Chicago, Illinois, and locations within 75 statute miles thereof, only.

(d) Subject to the provisions of § 7.308, the carrier frequency 162 Mc may be authorized for use by public coast stations at any location where, as a result of such use, harmful interference will not be caused to United States government stations using frequencies in the government frequency-band 162–174 Mc.

§ 7.308 *Conditions imposed upon assignments in 156–162 Mc band.* (a) The carrier frequency 161.9 Mc (or alternatively 157.4 Mc subject to the provisions of paragraph (a) (1) of § 7.307) is assignable primarily to public coast statons employing frequency modulation for telephony which provide service to one or more of the harbors or ports designated herewith:

Portland, Maine
Albany, N. Y.
Boston, Mass.
Providence, R. I.
New Haven, Conn.
New York, N. Y.
Philadelphia, Pa.
Baltimore, Md.
Norfolk, Va.
Newport News, Va.
Hampton Roads, Va.
Charleston, S. C.
Savannah, Ga.
Jacksonville, Fla.
Miami, Fla.
Tampa, Fla.
Mobile, Ala.
New Orleans, La.
Baton Rouge, La.
Lake Charles, La.
Port Arthur, Tex.
Beaumont, Tex.
Texas City, Tex.
Galveston, Tex.
Houston, Tex.
Corpus Christi, Tex.
Port Aransas, Tex.
San Diego, Calif.
Long Beach, Calif.
Wilmington, Calif.
Port San Luis, Calif.
Estero Bay, Calif.
San Francisco, Calif.
Coos Bay, Oreg.
Portland, Oreg.
Takoma, Wash.
Seattle, Wash.
Everett, Wash.
Duluth, Minn.
Superior, Wis.
Two Harbors, Minn.
Ashland, Wis.
Presque Isle (Marquette County), Mich.
Marquette, Mich.
Port Inland, Mich.
Escanaba, Mich.
Green Bay, Wis.
Milwaukee, Wis.
Ludington, Mich.
Calcite (Rogers City), Mich.
Detroit, Mich.
Toledo, Ohio.
Sandusky, Ohio.
Lorain, Ohio.
Cleveland, Ohio.
Ashtabula, Ohio.
Conneaut, Ohio.
Erie, Pa.
Buffalo, N. Y.
Pittsburgh, Pa.
Louisville, Ky.
St. Louis, Mo.
Memphis, Tenn.

Public coast stations (except stations located at Chicago, Ill., or within 75 statute miles thereof) which provide service to any harbor or port not specifically designated in this subsection may be assigned the carrier frequency 161.9 Mc (or alternatively 157.4 Mc subject to the provisions of paragraph (a) (1) of § 7.307) upon the express condition that (1) such assignment shall be on a secondary basis with respect to use of this assigned frequency by a station or stations providing service (existing or in the future) to any harbor or port specifically designated in this paragraph and (2) interference shall not be caused to the service rendered any harbor or port specifically designated in this paragraph.

(b) The carrier frequency 162 Mc (or alternatively 157.1 Mc. subject to the provisions of paragraph (a) (1) of § 7.307) is assignable to public coast stations employing frequency modulation for telephony which are located at Chicago, Ill., or within 75 statute miles thereof and provide service to one or more of the harbors or ports designated herewith:

Chicago, Ill.
Gary, Ind.
Indiana Harbor, Ind.

In addition, the carrier frequency 156.4 Mc or alternatively 157.4 Mc subject to the provisions of paragraph (a) (1) of § 7.307) is assignable to public coast stations which are located at Chicago, Ill., or within 75 statute miles thereof and provide service to one or more of the harbors or ports specifically designated in this paragraph.

Public coast stations which provide service to any other harbor or port within 75 statute miles of Chicago, Ill., may be assigned the carrier frequency 162 Mc. (or alternatively 157.1 Mc. subject to the provisions of paragraph (a) (1) of § 7.307) or the carrier frequency 156.4 Mc. (or alternatively 157.4 Mc. subject to the provisions of paragraph (a) (1) of § 7.307) upon the express condition that (1) such assignment shall be on a secondary basis with respect to use of either of these assigned frequencies by a station or stations providing service (existing or in the future) to one or more of the harbors or ports specifically designated in this paragraph and (2) interference shall not be caused to the service rendered any harbor or port specifically designated in this paragraph.

(c) In addition to the provisions of paragraph (b) of this section, the carrier frequency 162 Mc. (or alternatively 157.1 Mc. subject to the provisions of paragraph (a) (1) of § 7.455) is assignable to any public coast station employing frequency modulation for telephony and located more than 75 miles from Chicago, Illinois: *Provided,*

(1) The carrier frequency 162 Mc. (or alternatively 157.1 Mc.) normally shall be assigned only to a station licensee who already is licensed to use the carrier frequency 161.9 Mc. (or alternatively 157.4 Mc.) to provide service to the particular harbor(s) or port(s) involved and who is utilizing the latter assigned frequency at maximum capacity to provide such service under the prevailing conditions of operation; or the applicant for authority to use 162 Mc. (or alternatively 157.1 Mc.) is not in a position to use the carrier frequency 161.9 Mc. (or alternatively 157.4 Mc.) because the use thereof in the geographic area involved would create interference to stations already authorized to use this carrier frequency; and

(2) The licensee of any coast station to which the carrier frequency 161.9 Mc. is already assigned who applies for additional authority to use the carrier frequency 162 Mc. (or alternatively 157.1 Mc.) shall fully justify a need for such additional frequency assignment; and

(3) Any other applicant for authority to use the carrier frequency 162 Mc. (or alternatively 157.1 Mc.) shall show a need for such frequency assignment in lieu of the carrier frequency 161.9 Mc. (or alternatively 157.4 Mc.).

§7.309 *Use of assigned frequency 156.8 Mc.* (a) The radio-channel of which 156.8 Mc. is the authorized carrier frequency is designated primarily for calling and safety purposes. It may be used for safety communication [5] as an alternative to the radiotelephone calling and distress frequency 2182 kc, when appropriate, by public coast stations employing telephony for short-distance communication.

(b) In addition to the provisions of paragraph (a) of this section, this radio-channel may be used when necessary by public coast stations for:

(1) Call, reply, and the exchange of brief operating signals;

(2) Brief operating signals preparatory to working an another radio-channel;

(3) Announcing transmission to be made soon thereafter, on another radio-channel, which transmission is of general interest to ship stations, including ordinary weather and hydrographic information; and

(4) In accordance with the provisions of paragraph (b) of § 7.302, the exchange with other coast stations of operating signals, brief service messages, and emergency messages; on condition that such communication shall not interfere with calls from or to mobile stations.

(c) The use of this radio-channel by public coast stations for transmission of any other category is not authorized.

(d) Although use of the assigned frequency 156.8 Mc. by public coast stations for call and reply is authorized, calling and replying by these stations shall, in general, be conducted on a radio-channel authorized primarily for working.

§ 7.310 *Identification of station.* (a) All radiotelephone emissions of a public coast station shall be clearly identified by voice transmission therefrom in the English language of either the official call sign assigned to that station by the Commission or the approximate geographic location of the station as approved [6] in each case by the Commission upon request made by the station licensee or permittee: *Provided,* That, in addition to identification of the station by voice, the official call sign may be clearly transmitted by tone-modulated telegraphy in the International Morse Code either by a duly licensed radiotelegraph operator or by means of an automatic device approved [7] for this purpose by the Commission. Identification as herein prescribed shall be made—

(1) At the beginning and upon completion of each communication with any other station; and

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[5] See paragraph (a) of § 7.7 for the definition of safety communication.

[6] Such voice identification as "Washington marine operator" to indicate that the station is located at or near Washington, D. C., may be approved if there will be no conflict with identification of any other station.

[7] The conditions to be met by such a device in order to obtain the approval of the Commission will be determined and will be incorporated in proposed rule-making.

(2) At the beginning and upon conclusion of each transmission made for any other purpose.

§ 7.311 *Procedure in testing.* (a) Public coast stations are authorized to carry on such routine tests as may be required for the proper maintenance of the station provided each such station shall use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelephone testing procedure described below shall be followed:

(1) The licensed radio operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The official call sign and the geographic location of the testing station, followed by the word "test," shall be announced by voice on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in subparagraph (2), any station transmits by voice the word "wait," testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4);

(4) The operator shall repeat the word "test" followed by the count "1, 2, 3, 4, * * * etc.," which in turn shall be followed by voice announcement of the official call sign of the testing station and its approximate geographic location.

(b) When radiotelephone testing is conducted on the assigned frequency 2182 kc or 156.8 Mc, the test transmissions shall not continue for more than 10 seconds.

§ 7.312 *General radiotelephone operating procedure*—(a) *Limitations on calling.* (1) Except when transmitting a general call to all stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a public coast station shall call the particular station with which it intends to communicate.

(2) Public coast stations may use authorized [1] classes of emission for selective-calling on each radio-channel authorized for working. The use of selective-calling on the radio-channel of which either 2182 kc or 156.8 Mc is the authorized carrier frequency is prohibited.

(3) Calling a particular station, either by voice or by other means, shall not continue for a period of more than thirty seconds in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of five minutes.

(4) Each public coast station, when using selective-calling to secure the attention of a ship station with which it intends to communicate, shall transmit the type of signal and the particular signal code necessary to actuate the automatic attention device (selective ringer) known to be installed in the particular ship station and normally used for monitoring the coast station radio-channel which is used for transmitting such calls.

(5) Except in the event of an emergency involving safety, a public coast station, with respect to operation on any radio-channel which is used also by other coast stations within the same communication area, shall not answer, or attempt to answer, a ship station until the latter has transmitted the call sign or name of the particular coast station with which it desires to communicate.

(6) A public coast station shall not attempt to communicate with a ship station that has specifically called another coast station until it becomes evident that the called station does not answer, or that communication between the ship station and the called station cannot be carried on because of unsatisfactory operating conditions.

(b) *Time limitation on calling frequency.* Transmission by coast stations on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed 3 minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(c) *Change to working frequency.* After establishing communication with another station by call and reply on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency, coast stations shall change to an authorized working channel for the transmisison of messages which, under the provisions of this Subpart, cannot be transmitted on the respective calling channel.

(d) *Time limitation on public correspondence.* Any one exchange of public correspondence between a public coast station and a public ship station shall not exceed 10 minutes in duration. The period of time required to establish connection between a public land-line telephone and the ship station, prior to actual exchange of public correspondence, is not included within this time limitation. Subsequent to any one exchange of public correspondence of ten minutes or less, the same working channel shall not again be used by the coast station for communication with the same ship station until five minutes have elapsed; provided that this limitation shall not apply in event of an emergency involving safety.

(e) *Use of busy signal.* A public coast station, when communicating with a ship station which transmits to the coast station on a radio-channel which is a different channel from that used by the coast station for transmission, may transmit a "busy" signal whenever transmission from the ship stations is being received and during such other periods of time, pending completion of any one exchange of communications, as may be considered necessary by the coast station to avoid or minimize interference from other stations.

(f) *Limitation on 6470 kc and 8585 kc on Great Lakes.* Public coast stations in the Great Lakes area, authorized to use the carrier frequency 6470 kc or 8585 kc pursuant to § 7.304 (d) (7), shall, during the periods from local sunset to local sunrise, not transmit on these frequencies whenever the necessary communication can be effected on authorized frequencies below 5000 kc or above 30 Mc.

§ 7.313 *Station documents.* Public coast stations using telephony shall be provided with and have readily available during their hours of service the documents hereinafter specified:

Document	*Class of public coast station which must be provided with the document listed in the column at the left*
Parts 7 and 8 of the Commission's rules	Classes I, II, and III.
Valid station license	Classes I, II, and III.
Necessary operator license or licenses	Classes I, II, and III.
Station log required by this part	Classes I, II, and III.
Alphabetical List of Call Signs prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).	Class I; and Class II stations that provide communication with ocean-going vessels.
List of Coast Stations and Ship Stations prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).	Class I; and Class II stations that provide communication with ocean-going vessels.

§ 7.314 *Station records.* (a) Public coast stations using telephony shall maintain an accurate radiotelephone log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved of or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The time of making an entry shall be shown opposite the entry and shall be expressed in Greenwich mean time (GMT), except that, in the Great Lakes region, the time shall be expressed in eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock, beginning at

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[1] See those provisions of Subpart E relative to authorized classes of emission.

midnight) and for public coast stations which communicate exclusively with vessels on inland waters of the United States (other than the Great Lakes) the time shall be expressed in local standard time (e. s. t., c. s. t., etc., counted from 00:00 to 24:00 o'clock, beginning at midnight). The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "GMT" (e. s. t. in the Great Lakes area) (e. s. t., c. s. t., etc., for stations serving inland waters exclusively) shall be marked at the head of the column in which the time is entered.

(4) With respect to public coast stations, which by reason of the provisions of Subpart G of this part, are required to maintain a watch on the radio-channel designated for radiotelephone calling and distress (assigned frequency 2182 kc), or on the radiotelephone calling channel above 100 Mc (assigned frequency 156.8 Mc), entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering and exchanging operating signals and safety communications on this radio-channel. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries and the operator(s) who actually maintains such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(5) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries shall appear in the log and shall be properly related to each particular entry of this category.

(6) All calls transmitted from or received by a coast station shall be entered, showing the call signs or names of vessels; the time, and the assigned frequencies involved: *Provided, however*, That when the manual operations of switching and handling of telephone calls directly between a ship telephone station and landline telephone facilities are not normally performed by a licensed radio operator, the entries prescribed by this subsection may be omitted from the station log upon the express condition that equivalent records shall be currently maintained by the station licensee. Such records shall be made available upon request of an authorized Commission representative. The equivalent records shall include the time and such other notations as are necessary to identify the frequency(s) employed and the station(s) communicated with or heard. In addition, for each communication handled, a notation shall be made of the points of origin and destination of the communication. Local standard time may be used to record the occurrence in the equivalent record in lieu of Greenwich mean time or Eastern Standard Time prescribed by subparagraph (3): *Provided*, That the licensee may be required, upon request of an authorized Commission representative, to convert the standard time recorded to that specified in subparagraph (3).

(7) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(8) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(9) A daily entry shall be made regarding comparison of the time indicated by the required clock(s) with standard time, including a statement of any deviations observed and corrections made.

(10) Failure of apparatus to operate as required, failure of power supply, and incidents tending to unduly delay communication shall be entered.

(11) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the assigned frequency(s) as may be observed, and a statement of any corrective action taken.

(12) An entry shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed, and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(13) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this part.

SUBPART J—LIMITED COAST STATIONS AND MARINE-UTILITY STATIONS: USE OF TELEPHONY

§ 7.351 *Supplemental eligibility requirements.* (a) Subject to the statutory eligibility requirements set forth in § 7.23, an authorization for a limited coast station or a marine-utility station may be granted to any person, or state or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act provided the applicant is—

(1) Regularly engaged in the operation of one or more commercial transport vessels,[1] or

(2) An organization of which all persons who are members or shareholders are regularly engaged in the operation of one or more commercial transport vessels,[1] or

(3) A non-profit corporation or association, organized for the purpose of furnishing a maritime mobile service solely to persons who are regularly engaged in the operation of one or more commercial transport vessels,[1] or

(4) Legally responsible for the operation, control, or development of a harbor, port, or waterway used by commercial transport vessels.[1]

(b) Each application for station authorization for a limited coast station or a marine-utility station shall be accompanied by a written statement in detail sufficient to indicate clearly the applicant's eligibility under paragraph (a) of this section.

§ 7.352 *Cooperative use of facilities.* (a) A person, state or local government subdivision, or any agency of the Federal Government subject to the provisions of section 301 of the Communications Act, engaged in the operation of one or more Commercial transport vessels may receive maritime mobile service from a limited coast station or a marine-utility station used on shore even though not the licensee of the limited coast station or the marine-utility station. The rendition of such service, however, will not be required of the licensee of the limited coast station or the marine-utility station without his consent, except as may be necessary in the enforcement of paragraph (c) of this section. The necessary cooperative arrangements for this purpose will be governed by the following provisions:

(1) Such persons, state or local government subdivisions or Federal agencies may, and in the case of foreign persons shall themselves, be the licensees of the radio stations installed on board their respective commercial transport vessels: *Provided*, That prior to receiving an authorization to render service to the involved ship station(s), the licensee of the coast station or the marine-utility station from whom the service is to be received files a request for authority to render such maritime mobile service to the person or government agency who is to receive the service. The request must be notarized but may be in letter form, submitted in duplicate. Upon approval of the request, the Commission will designate on the coast station or marine-utility station authorization the persons or government agencies to whom service may be rendered.

(2) The licensee of a limited coast station or marine-utility station used on shore may install licensed ship radio stations on board United States commercial transport vessels of other persons or appropriate government agencies of the United States: *Provided*, That in each case such persons or government agencies shall enter into a written agreement verifying that the ship station licensee has the sole right of control of the involved ship stations, that the vessel operators shall use the ship stations subject to the orders and instructions of the licensee of the coast station or marine-

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[1] See paragraph (p) of § 7.2 which defines "commercial transport vessel."

utility station on shore, and that the said licensee shall have, at all times, such access to and control of the ship station equipment as will enable him to carry out his responsibilities under the ship station license. A copy of the agreement with vessel owners required hereby shall be kept with the coast station or marine-utility station records and held available for inspection by Commission representatives.

(3) All provisions of this section applicable to ship stations are applicable also to marine-utility stations while the latter are used on board commercial transport vessels, and to stations on board commercial transport vessels of any foreign country.

(b) All cooperative arrangements entered into under the provisions of this section shall be governed by the following requirements as to costs and charges:

(1) The arrangement must be established on a non-profit, cost-sharing basis by written contract between the parties and a copy of the contract must be kept with the records of the coast station or the marine-utility station and held available for inspection by Commission representatives.

(2) Contributions to capital and operating expenses may be accepted only on a cost-sharing, non-profit basis, said costs to be prorated on an equitable basis among all persons or government agencies who are parties to the cooperative arrangement. Records which reflect the cost of the service and its non-profit, cost-sharing nature shall be maintained by the licensee of the coast station or the marine-utility station and held available for inspection by Commission representatives. An audited financial statement reflecting the non-profit, cost-sharing nature of the arrangement shall be submitted by the licensee of the coast station or the marine-utility station annually to the Commission's Washington office no later than three months after the close of the licensee's fiscal year.

(c) If, in a particular geographic area, the use and operation of limited coast stations and (or) marine-utility stations by a plurality of station licensees using the same frequency assignment(s) causes intolerable interference, even though all provisions of this subpart relative to the reduction of interference have been fully complied with, the Commission may, in accordance with the provisions of the Communications Act, require the involved station licensees to join in a single cooperative organization for rendition of the necessary maritime mobile service within the affected area by a single station licensee.

§7.353 [Deleted.]

§ 7.354 *Points of communication.* (a) Limited coast stations and marine-utility stations using telephony are authorized to communicate normally with the classes of ship stations designated herewith, subject to the conditions and limitations imposed by the terms of their particular station licenses or by the applicable provisions of this part with respect to the use of particular radio-channels:

(1) Any ship station or any marine-utility station on board ship, using telephony on the assigned frequency 156.8 Mc (or 2182 kc when this frequency is assigned)

(2) Specified limited ship stations and specified marine-utility stations on board commercial transport vessels licensed by the Commission and using telephony on a frequency assignment designated for this purpose;

(3) Specified public ship stations on board commercial transport vessels, licensed by the Commission and using telephony on a frequency assignment designated for this purpose;

(4) Specified ship stations of any foreign country on board commercial transport vessels and using telephony on the radiochannel of which 156.6 Mc is the authorized carrier frequency.

(5) Additionally, when necessary to expedite communication by telephony between a ship station and a public coast station on a frequency assignment above 100 Mc, limited coast stations may communicate on the assigned frequency 156.8 Mc with other coast stations (public, limited, or government) for the exchange of operating signals, brief service messages, and emergency messages on condition that such communication shall not interfere with calls from or to mobile stations.

(b) With respect to the terms of paragraphs (a) (2), (3), and (4) of this section, the specific ship stations or marine-utility stations on board ship with which a limited coast station or a marine-utility station on shore is authorized to communicate shall be designated appropriately in the license of such coast station or marine-utility station.

(c) Upon application and satisfactory showing of a need therefor, two or more limited coast stations of the same station licensee may be specifically authorized by the terms of their respective station licenses to communicate on a secondary basis between themselves, *Provided,*

(1) Any communication carried on shall be confined exclusively to that absolutely necessary for the business or operational needs of the ship(s) with which at least one of the involved coast stations is authorized to communicate; and

(2) Other point-to-point communication facilities between the particular coast station locations are inadequate, inoperative, economically impracticable, or unavailable; and

(3) Any two coast stations of this category which communicate with each other are separated by not more than 100 miles; and

(4) Neither harmful interference nor intolerable delay is caused to communication with or between mobile stations; and

(5) Such communication shall occur only on a frequency assignment above 30 Mc except on the radio-channel of which 156.6 Mc or 156.8 Mc is the authorized carrier frequency.

§ 7.355 *Nature of service.* (a) Limited coast stations and marine-utility stations using telephony shall—

(1) Not be open to public correspondence;

(2) Not be used to render a communications common carrier service;

(3) Not be used to transmit program material of any kind for use in connection with radio broadcasting;

(4) Not be used for the transmission of press material or news items which are not required to serve the business or operational needs of ships;

(5) Be used exclusively to serve the operational and business needs of ships, including the transmission of safety communication.[3]

(b) In areas where adequate and appropriate weather and hydrographic information is transmitted by means of telephony through the medium of one or more public coast stations or United States government stations, limited coast stations and marine-utility stations on shore shall not duplicate that service. In all other respects, limited coast stations and marine-utility stations on shore may transmit by means of telephony such weather and hydrographic information as is required for the business and operational needs of the ships with which they normally communicate.

(c) Each marine-utility station on shore shall be used and operated exclusively within the limits of the geographic area specified in the particular station license. Except as specifically provided otherwise in this part, each marine-utility station on shore shall be used and operated as a limited coast station and in accordance with all rules and regulations applicable to such coast stations.

§ 7.356 *Assignable frequencies above 30 Mc.* (a) Carrier frequencies above 100 Mc which may be authorized for use by limited coast stations and marine-utility stations on shore, employing frequency-modulation for telephony, and for transmission and reception on the same radio-channel, are designated herewith:

(1) For all geographic areas:

156.4 Mc for working (except at Chicago, Illinois, and locations within 225 miles thereof);
156.5 Mc for working;
156.6 Mc for working; primarily for harbor or port operational traffic;
156.8 Mc for calling and safety purposes.

(2) For stations at locations (except on the Great Lakes, on the Mississippi River and tributary waters, and on the Gulf of Mexico intracoastal waterway) where the use of an additional working frequency assignment is required:

157.0 Mc for working.

Each of these assignable frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee.

(b) Carrier frequencies which are assignable to limited coast stations and marine-utility stations on shore primarily for working with specified classes of commercial transport vessels are designated herewith; these frequency assignments shall be used for the specific purposes herein prescribed in preference to other frequency assignments available for these classes of stations whenever practicable:

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[3] See paragraph (a) of § 7.7 which defines "safety communications."

(1) For stations which provide service to vessels in the vicinity of one or more of the harbors or ports designated herewith: *Provided*, That stations which serve any seaboard harbor or port of the continental United States not specifically designated in this subparagraph may be assigned one or more of these carrier frequencies upon the express condition that (i) such assignment shall be on a secondary basis with respect to use of such assigned frequency or frequencies by a station or stations providing service (existing or in the future) to any harbor or port specifically designated in this subparagraph and (ii) interference shall not be caused to the service rendered any harbor or port specifically designated in this subparagraph:

Portland, Maine.
Albany, N. Y.
Boston, Mass.
New Haven, Conn.
New York, N. Y.
Providence, R. I.
Philadelphia, Pa.
Baltimore, Md.
Norfolk, Va.
Newport News, Va.
Hampton Roads, Va.
Charleston, S. C.
Savannah, Ga.
Jacksonville, Fla.
Miami, Fla.
Tampa, Fla.
Mobile, Ala.
Baton Rouge, La.
Lake Charles, La.
New Orleans, La.
Port Arthur, Tex.
Beaumont, Tex.
Texas City, Tex.
Galveston, Tex.
Houston, Tex.
Corpus Christi, Tex.
Port Aransas, Tex.
San Diego, Calif.
Long Beach, Calif.
Wilmington, Calif.
Port San Luis, Calif.
Estero Bay, Calif.
San Francisco, Calif.
Coos Bay, Oreg.
Portland, Oreg.
Tacoma, Wash.
Seattle, Wash.
Everett, Wash.

156.4 Mc for communication with vessels which are navigated primarily within harbor or port areas, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States;

156.5 Mc for communication with commercial transport vessels of any class which are navigated primarily between separate harbors or ports; and with commercial fishing vessels;

156.6 Mc for communication with vessels within harbor or port areas or within the vicinity thereof, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States;

157.0 Mc for communication with commercial transport vessels of the class or classes specified by the Commission, as required from time to time by prevailing needs, in respect to particular harbor or port areas, or in respect to particular stations: *Provided* That in order to avoid interference to intership communication, this carrier frequency is not assignable to any coast station or marine-utility station on shore which is located within 100 miles of the Mississippi River or any tributary thereof, nor within 100 miles of any portion of the Gulf of Mexico intercoastal waterway.

(2) For stations serving vessels on the Great Lakes which provide such service to one or more of the harbors or ports designated herewith: *Provided*, That stations which serve any Great Lakes harbor or port not specifically designated in this subparagraph may be assigned one or more of these carrier frequencies upon the express condition that (i) such assignment shall be on a secondary basis with respect to use of such assigned frequency or frequencies by a station or stations providing service (existing or in the future) to any harbor or port specifically designated in this subparagraph and (ii) interference shall not be caused to the service rendered any harbor or port specifically designated in this subparagraph:

Duluth, Minn.
Superior, Wis.
Two Harbors, Minn.
Ashland, Wis.
Presque Isle (Marquette County), Mich.
Marquette, Mich.
Port Inland, Mich.
Escanaba, Mich.
Green Bay, Wis.
Milwaukee, Wis.
Ludington, Mich.
Calcite (Rogers City), Mich.
Detroit, Mich.
Toledo, Ohio.
Sandusky, Ohio.
Lorain, Ohio.
Cleveland, Ohio.
Ashtabula, Ohio.
Conneaut, Ohio.
Erie, Pa.
Buffalo, N. Y.
Chicago, Ill.
Indiana Harbor, Ind.
Gary, Ind.

156.4 Mc for communication with ferries which are navigated primarily between separate harbors or ports, and commercial fishing vessels (except at Chicago, Illinois, and locations within 225 miles thereof, at which the carrier frequency 156.5 Mc shall be assignable for this purpose in lieu of 156.4 Mc);

156.5 Mc for communication with commercial transport vessels of any class (except ferries) which are navigated primarily between separate harbors or ports; and additionally for stations at Chicago, Illinois, and locations within 225 miles thereof, for communication with ferries which are navigated primarily between separate harbors or ports and with commercial fishing vessels;

156.6 Mc for communication with vessels within harbor or port areas or within the vicinity thereof including tugs, towboats, barges, wreckers, dredges, local ferries, repair ships, pilot boats, and harbor craft of municipalities or States.

(3) For stations serving vessels on the Mississippi River and tributaries and the Gulf of Mexico intracoastal waterway which provide such service to one or more of the harbors or ports designated herewith: *Provided*, That stations which serve any harbor or port on the Mississippi River or any tributary thereof or on the Gulf of Mexico intracoastal waterway not specifically designated in this subparagraph nor in subparagraph (1) of this paragraph may be assigned one or more of these carrier frequencies upon the express condition that (i) such assignment shall be on a secondary basis with respect to use of such assigned frequency or frequencies by a station or stations providing service (existing or in the future) to any harbor or port specifically designated in this subparagraph or in subparagraph (1), and (ii) interference shall not be caused to the service rendered any harbor or port specifically designated in this subparagraph or in subparagraph (1):

Pittsburgh, Pa.
Louisville, Ky.
St. Louis, Mo.
Chicago, Ill.
Memphis, Tenn.

156.4 Mc for communication with commercial transport vessels of the class or classes specified by the Commission, as required from time to time by prevailing needs, in respect to particular harbor or port areas, or in respect to particular stations (not assignable to stations at Chicago, Illinois, nor at locations within 225 miles thereof);

156.5 Mc for communication with commercial transport vessels of any class which are navigated primarily between separate harbors or ports; and with commercial fishing vessels;

156.6 Mc for communication with vessels within harbor or port areas or within the vicinity thereof, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States.

(4) For stations serving vessels in any area not specified in subparagraphs (1), (2), and (3) of this paragraph.

156.4 Mc for communication with vessels which are navigated primarily within harbor or port areas, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States;

156.5 Mc for communication with commercial transport vessels of any class which are navigated primarily between separate harbors or ports, and with commercial fishing vessels;

156.6 Mc for communication with vessels within harbor or port areas or within the vicinity thereof, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States;

157.0 Mc for communication with commercial transport vessels of the class or classes specified by the Commission, as required from time to time by prevailing needs, in respect to particular harbor or port areas, or in respect to particular stations, *Provided*, That in order to avoid interference to intership communication, this carrier frequency is not assignable to any coast station or marine-utility station on shore which is located within 100 miles of the Mississippi River or any tributary thereof nor within 100 miles of any portion of the Gulf of Mexico Intracoastal Waterway.

(c) Carrier frequencies within the band 30 Mc to 50 Mc which may be authorized for use by limited coast stations and marine-utility stations on shore employing either frequency modulation or amplitude modulation for telephony, for transmission and reception on the same radio-channel, are designated herewith:

Carrier frequency:	*Normal geographic area of use*
35.06 Mc	Gulf coast area, Puerto Rico, and Virgin Islands.
35.10 Mc	Pacific coast area and islands of the Pacific Ocean.
35.14 Mc	Atlantic coast area.
35.18 Mc	Mid-continent area, including Great Lakes.

Each of these assignable frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee.

(d) Any coast station not open to public correspondence and licensed prior to March 1, 1949, for the use of telephony on the radio-channel of which 43.02 Mc is the authorized carrier frequency, may continue to be licensed as a limited coast station for use of this radiochannel with class of emission, authorized frequency-band, type of modulation, and maximum power as licensed prior to March 1, 1949, upon the condition that the carrier frequency shall be maintained within 0.01 percent of the authorized carrier frequency 43.02 Mc and that interference shall not be caused to any station in any other service.

§ 7.357 *Conditions imposed upon assignments in 35–36 Mc band.* (a) Each application which requests assignment of a carrier frequency designated in paragraph (c) of § 7.356 shall designate normally the carrier frequency specified in that subsection for use in the geographic area in which the coast station or the marine-utility station on shore is located. Normally, only that carrier frequency is assignable for use in that area. When any other of these carrier frequencies is requested for assignment in a specified area, the application therefor shall include a satisfactory showing that the carrier frequency designated in paragraph (c) of § 7.356 for use in the particular area will not meet the need of the proposed or existing service. When, in the opinion of the applicant, the location of the involved station is not clearly within one of the geographic areas designated in paragraph (c) of § 7.506, the applicant may obtain the necessary information in this respect by corresponding directly with the Commission at Washington, D. C.

§ 7.358 *Conditions imposed upon assignments in 156–162 Mc band.* Normally, a limited coast station or a marine-utility station on shore shall be authorized to use, for working, one radio-channel only, within the frequency band 156.35 Mc to 157.05 Mc in accordance with the terms of paragraph (b) of § 7.356. Application for authority to use more than one radio-channel for working shall include a satisfactory showing of need for such additional facility.

§ 7.359 *Use of assigned frequency 156.8 Mc.* (a) The radio-channel of which 156.8 Mc is the authorized carrier frequency is designated primarily for calling and safety purposes. It may be used when appropriate by limited coast stations and marine-utility stations employing telephony for short-distance communication as an alternative to the radiotelephone distress frequency 2182 kc, for distress calls and distress traffic, and for safety communication.[8]

(b) In addition to the provisions of paragraph (a) of this section, this radio-channel may be used by limited coast stations and marine-utility stations for:

(1) Call, reply, and the exchange of brief operating signals; and

(2) Operating signals preparatory to message traffic on another radio-channel within the frequency-band 156.35 Mc to 157.05 Mc; and

(3) In accordance with the provisions of paragraph (a) (5) of § 7.354 the exchange with other coast stations of operating signals, brief service messages, and emergency messages.

(c) The use of this radio-channel by limited coast stations or marine-utility stations for transmission of any other category is not authorized.

§ 7.360 *Call and reply on working channels.* Although use of the assigned frequency 156.8 Mc by limited coast stations and marine-utility stations on shore for call and reply is authorized, calling and replying by these stations shall, in general, be conducted on a radio-channel authorized primarily for working.

§ 7.361 *Use of assigned frequency 156.6 Mc.* The radio-channel of which 156.6 Mc is the authorized carrier frequency is designated primarily for communication concerning port operations. It may be used by limited coast stations and marine-utility stations, with discretion, to serve other business and operational needs of ships on condition that such use shall not interfere with nor delay the exchange of port operational message traffic.

§ 7.362 *Limitations on use of marine-utility stations.* (a) Marine-utility stations on shore shall be used and operated solely within the local geographic area specified in the particular station license.

(b) Neither the antenna nor the antenna supporting structure of a marine-utility station on shore shall—

(1) Exceed 150 feet in height above ground level;

(2) Exceed, in over-all height above ground level, 5 feet for each 500 feet of distance, or fraction thereof, from the nearest boundary of a landing area.

(c) Marine-utility stations on shore shall not be used or operated in the immediate vicinity of any radio transmitting or receiving installation of a coast station, a base station in any land mobile service, or a U. S. government station, which transmits or receives on any radio-channel(s) above 30 Mc unless the fact has been established, by actual tests in cooperation with the involved station(s), that interference is not caused by such operation to the service of the coast, base, or government station(s) concerned.

§ 7.363 *Use of working frequencies for calling.* In addition to any radio-channel of which the carrier frequency is specifically authorized herein for "calling", the radio-channels authorized in this subpart for "working" may be used for call and reply also, provided interference is not caused to any communication in progress on the particular working channel.

§ 7.364 *Time limitation on communication.* All communication engaged in by limited coast stations and marine-utility stations shall be limited to the minimum practicable transmission time, and each station licensee shall employ standardized operating practices and procedures to this effect.

§ 7.365 *Frequencies below 3000 kc for business and operational purposes.* (a) In addition to availability of the carrier frequency 2738 kc primarily for inter-ship communication as prescribed in § 8.358 of the rules of the Commission, this frequency may, in response to proper application therefor, be specifically authorized in limited coast station licenses for use (except in the Great Lakes area) to a limited extent in communicating by telephony (amplitude modulation) with such ship stations as are designated in the respective coast station license, *Provided*,

(1) The applicant makes a showing satisfactory to the Commission that exceptional and limited use of this carrier frequency for ship-shore communication, in lieu of a different comparable frequency, or a frequency above 30 Mc, normally authorized for ship-shore communication (public correspondence or otherwise) is necessary to serve an important business or operational need of one or more commercial transport vessels (other than public correspondence) and that the desired communication will be effective even though ship-to-ship communication for safety and other purposes has priority in the use of this frequency; and

(2) Harmful interference will not be caused to the service of ship-to-ship communication on the radio-channel of which 2738 kc is the authorized carrier frequency; and

(3) The plate-input power to be used will be the minimum amount necessary to provide effective ship-shore communication on this radio-channel and will not at any time exceed the average plate-input power generally used by ship stations for inter-ship communication on this radio-channel; and

(4) The ship-shore communication on this radio-channel shall be limited exclusively to that which is necessary to serve an important business or operational need of commercial transport vessels (excluding public correspondence);

(5) The use of this carrier frequency in accordance with any station authorization granted pursuant to this section shall be on a shared basis with any other coast station using this same frequency in accordance with a similar station authorization.

(b) The carrier frequency 2214 kc may, in response to proper application therefor, be specifically authorized in the license of a limited coast station for use exclusively at locations at which interference is not caused to the service of any United States Government Station, in communicating by telephony (amplitude modulation) with such ship station(s) on board commercial transport vessel(s) (when they use this same carrier frequency for transmission) as are designated in the particular coast station license, *Provided*,

(1) The applicant makes a showing satisfactory to the Commission that use of this carrier frequency, in lieu of a frequency above 30 Mc normally authorized for use by ship stations, is necessary to serve an important business or operational need of commercial transport vessel(s) (other than public correspondence); and

(2) The communication carried on by the limited coast station on the radio-channel of which 2214 kc is the authorized carrier frequency shall be limited exclusively to that which is necessary to serve an important business or operational need of commercial transport vessel(s) (excluding public correspondence); and

(3) The use of this carrier frequency in accordance with any station authorization granted pursuant to this section shall be on a shared basis with any other coast station using this same frequency in accordance with a similar station authorization.

§ 7.366 *Availability of 2182 kc for limited coast stations.*—(a) *Frequencies for calling.*—The general radiotelephone calling [4] frequency for the maritime mobile service of the United States is 2182 kc; it may be used as a carrier frequency for this purpose by limited coast stations operating in the maritime mobile service subject to the following conditions and limitations:

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[8] See paragraph (a) of § 7.7 for the definition of safety communication.

(1) Aside from distress calls and distress traffic, this frequency may be used for urgency and safety signals and for urgency and safety messages (other than ordinary business or operational messages).

(2) In addition, this frequency is authorized only for call and reply, and for signals preparatory to working on other frequencies;

(3) When using this frequency for other than distress calls and distress traffic, and urgency and safety signals and messages, the mean [5] antenna power of the unmodulated carrier wave shall not exceed 100 watts.

§ 7.367 *Procedure in testing.* (a) Limited coast stations and marine-utility stations are authorized to carry on such routine tests as may be required for the proper maintenance of the station provided each such station shall use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelephone testing procedure described below shall be followed:

(1) The licensed radio operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The official call sign and the geographic location of the testing station, followed by the word "test", shall be announced by voice on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in sub-subsection (2), any station transmits by voice the word "wait", testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subsection (4);

(4) The operator shall repeat the word "test" followed by the count "1, 2, 3, 4, * * * etc.", which in turn shall be followed by voice announcement of the official call sign of the testing station and its approximate geographical location.

(b) When radiotelephone testing is conducted on the assigned frequency 2182 kc or 156.8 Mc, the test transmissions shall not continue for more than 10 seconds.

§ 7.368 *General radiotelephone operating procedure*—(a) *Limitations on calling.* (1) Except when transmitting a general call to several stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a limited coast station or a marine-utility station shall call the particular station with which it intends to communicate.

(2) Limited coast stations may use authorized [6] classes of emission for selective-calling on each radio-channel authorized for working. The use of selective-calling on the radio-channel of which either 2182 kc or 156.8 Mc is the authorized carrier frequency is prohibited.

(3) Calling a particular station, either by voice or by other means, shall not continue for a period of more than thirty seconds in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of five minutes.

(4) Each limited coast station, when using selective-calling to secure the attention of a ship station with which it intends to communicate, shall transmit the type of signal and the particular signal code necessary to actuate the automatic attention device (selective ringer) known to be installed in the particular ship station and normally used for monitoring the coast station radio-channel which is used for transmitting such calls.

(5) Except in the event of an emergency involving safety, a limited coast station or a marine-utility station with respect to operation on any radio-channel which is used also by other stations within the same communication area, shall not answer, or attempt to answer, a station on board ship until the latter has transmitted the call sign or name of the particular shore station with which it desires to communicate.

(6) A limited coast station or a marine-utility station shall not attempt to communicate with a ship station that has specifically called another station until it becomes evident that the called station does not answer, or that communication between the ship station and the called station cannot be carried on because of unsatisfactory operating conditions.

(b) *Time limitation on calling frequency.* Transmission on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed 3 minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(c) *Change to working frequency.* After establishing communication with another station by call and reply on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency, land stations shall change to an authorized working channel for the transmission of messages which, under the provisions of this subpart, cannot be transmitted on the respective calling channel.

§ 7.369 *Station documents.* (a) Limited coast stations using telephony shall be provided with and have readily available during their hours of service, the following documents:

(1) A valid station license.

(2) The necessary operator license or licenses.

(3) The station log required by this part for stations of this category.

(4) Parts 7 and 8 of the Commisison's rules.

§ 7.370 *Station records.* (a) Limited coast stations using telephony shall maintain an accurate radiotelephone log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved of or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The time of making an entry shall be shown opposite the entry and shall be expressed in local standard time (e. s. t., c. s. t., etc., counted from 00:00 to 24:00 o'clock, beginning at midnight. The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "e. s. t.," "c. s. t.," etc., shall be marked at the head of the column in which the time is entered.

(4) With respect to limited coast stations, which, by reason of the provisions of subpart G of this part, are required to maintain a watch on the radio-channel above 100 Mc designated for calling (assigned frequency 156.8 Mc), entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering, and exchanging operating signals and

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[4] The frequency 2182 kc will be formally recognized as the international radiotelephone distress and calling frequency in Region 2 not later than the date on which Article 3 of the Inter-American Radio Agreement, Washington, 1949, becomes effective, and in Regions 1, 2, and 3 (world-wide) not later than the date on which the new International Frequency List becomes effective as provided by Article 47 of the International Radio Regulations, Atlantic City, 1947.

[5] As prescribed by paragraph 2, Article 3, of the Inter-American Radio Agreement, Washington, 1949. Article 1, paragraph 63 of the International Radio Regulations, Atlantic City, 1947, states as follows: "Mean power of a radio transmitter: The power supplied to the antenna during normal operation, averaged over a time sufficiently long compared to the period corresponding to the lowest frequency encountered in actual modulation". (In general, a time of one-tenth second, during which the mean power is a maximum, will be selected.)

[6] See those provisions of Subpart E relative to authorized classes of emission.

safety communications on this radiochannel. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries and the operator(s) who actually maintains such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(5) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety or life or property shall be entered, together with the time of such observation or occurrence, identification of the radio channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries shall appear in the log and shall be properly related to each particular entry of this category.

(6) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(7) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(8) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the assigned frequency(s) as may be observed, and a statement of any corrective action taken.

(9) An entry shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(10) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this part.

(b) Marine utility stations on shore shall maintain an accurate radiotelephone log during their hours of service as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include notation of the geographic area(s) in which the station is operated; the date and time of operation of the station; official call sign of the marine utility station, the name and signature of the licensed operator (or other person in accordance with Subpart F) who is responsible for operation of the marine utility station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

SUBPART K—STATIONS ON LAND IN THE MARITIME RADIOLOCATION SERVICE [1]

§ 7.401 *Limitation on station authorizations.* Pending further development of the use and operation of stations on land in the maritime radiolocation service, and until the requirements of this service have been more completely determined, only developmental station authorizations will be granted, subject to the applicable provisions of Subpart M of this part (including Supplemental eligibility requirements) and in accordance with the following sections of this subpart.

§ 7.402 *Assignable frequencies.* (a) The following frequency-bands are authorized for use by shore radionavigation stations (including shore radar stations) in the maritime radionavigation service; the maximum power shall be designated in each instrument of authorization; provided that for stations other than shore radar stations, the classes of emission, the frequency tolerance, and the bandwidth occupied by the emission may be designated in each station authorization.

3000 Mc to 3246 Mc.
5460 Mc to 5650 Mc.
9320 Mc to 9500 Mc.

(b) The following frequency-bands are authorized for use by shore radiolocation stations in the maritime radiolocation service; the class of emission, the frequency tolerance, the bandwidth occupied by the emission, and the maximum power may be designated in each station authorization:

(1) 2450 to 2500 Mc for purposes other than radionavigation or safety, on the condition that harmful interference shall not be caused to the fixed and mobile services, and on the condition that no protection shall be given from interference caused by emissions from industrial, scientific, or medical equipment.

(2) 3000 Mc to 3246 Mc, 5460 Mc to 5650 Mc, 9320 Mc to 9500 Mc. The use of frequencies within these bands for radiolocation, other than radionavigation, shall not cause harmful interference to the radionavigation service.

§ 7.403 *Special conditions imposed.* (a) An authorization granted for the construction and/or operation of a shore radio navigation station shall be subject to the express condition that in so far as the station may be operated to provide information to be used for the purpose of aiding in the movement of any ship, the station shall be treated as a private aid to navigation for which permission must be obtained by the station permittee or licensee from the Commandant, United States Coast Guard, as provided in section 759, Title 33, U. S. Code.

(b) Upon the grant of an authorization for the construction and/or operation of a shore radio navigation station, the Commission will forward to the Commandant, U. S. Coast Guard, Washington, D. C., notification thereof together with a copy of the authorization.

SUBPART L—FIXED STATIONS ASSOCIATED WITH THE MARITIME MOBILE SERVICE

MARINE FIXED STATIONS [1]

§ 7.451 *Supplemental eligibility requirements.* (a) Subject to the basic eligibility requirements set forth in § 7.23, authorizations for marine fixed stations may be granted to any person who is engaged in—

(1) Prospecting for, producing, collecting, refining, or transporting petroleum or petroleum products in the immediate vicinity of the marine fixed station requested; or

(2) An activity in the immediate vicinity of the marine fixed station requested which is necessary to a construction project of a public character.

(b) Additionally, and subject to the basic eligibility requirements set forth in § 7.23, authorizations for marine fixed stations may be granted to any nonprofit corporation or association, organized for the purpose of furnishing a radiocommunication service solely to persons who are actually engaged, in the immediate vicinity of the marine fixed station, in one or more of the activities designated in paragraph (a) of this section. Such a corporation or association shall render service only on a non-profit cost-sharing basis, said costs to be prorated on an equitable basis among all persons to whom service is rendered. Records which reflect the cost-sharing non-profit basis shall be maintained and held available for inspection by Commission representative.

§ 7.452 *Points of communication.* Marine fixed stations are authorized to communicate by means of telephony solely with Class II public coast stations in the United States when these stations render a communication service of telephony in direct connection with the general public service land-line telephone system, provided the marine fixed station, in each instance, is located not more than 300 statute miles from each coast station of this class with which it communicates.

§ 7.453 *Showing of need.* Applicants for authority to establish and operate marine fixed stations must satisfy the Commission, through information contained in the application or as otherwise determined by the Commission, that a need for the desired communication exists primarily in respect to the safety of life or property, and that the use of any communication facility to satisfy such need, other than a marine fixed station, is impossible or impracticable for the purpose involved.

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[1] The classes of stations established in this service are defined in § 7.4.

[1] This class of station is defined by paragraph (d) of § 7.5.

§ 7.454 *Assignable frequencies.* (a) Carrier frequencies within the band 2100 kc to 2210 kc, which are authorized by Part 8 of the Commission's rules for use by public ship stations employing telephony for the transmission of public correspondence to public coast stations (normally providing direct connection with public service land-line telephone systems), are assignable to marine fixed stations for the same purpose; upon the condition that neither harmful interference nor intolerable delay is caused to communication between coast stations and mobile stations.

(b) In addition to the assignable frequencies designated in paragraph (a) of this section, the carrier frequency 2182 kc is assignable to marine fixed stations solely for use in transmitting, by means of telephony with an antenna power not exceeding 100 watts (when no modulation is present) distress calls and distress traffic, and urgency and safety signals and messages. The use of this radiochannel by marine fixed stations for ordinary calls and replies is prohibited.

§ 7.455 *Technical requirements.* The authorized frequency tolerance, authorized class of emission, authorized emission-bandwidth, and authorized transmitter power for marine fixed stations is set forth in Subpart E of this part.

§ 7.456 *Scope of communication.* Marine fixed stations shall be used primarily for safety communication, as defined in paragraph (a) of § 7.7: *Provided, however,* That other than safety communication may be carried on, by these stations, with discretion and to the extent required in behalf of the specific activities set forth in § 7.451: *Provided,* That, in this respect, priority at all times shall be given to use of the assigned radio-channel(s) for ship to shore transmission.

§ 7.457 *Station documents.* (a) Each marine fixed station shall be provided with the following documents:

(1) A valid station license.

(2) The necessary operator license or licenses.

(3) The station log required by § 7.458.

(4) Parts 7 and 8 of the rules of the Commission.

§ 7.458 *Station records.* (a) Marine fixed stations shall maintain an accurate radiotelephone log during their hours of service as follows; all entries shall be made by the licensed operator on duty at the station, except as otherwise provided in subparagraph (2) of this paragraph:

(1) Each sheet of the log shall be numbered in sequence and shall include the date(s) and time(s) of operation of the station; official call sign of the station, the name and signature of the licensed operator who is responsible for operation of the station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(3) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radiochannel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined.

(4) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(5) All test transmissions shall be entered, including the date, time, and purpose thereof.

(6) The date and time of making each entry shall be shown opposite the entry and the time shall be expressed in local standard time as follows. The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation E. S. T., C. S. T., etc., shall be marked at the head of the column in which time is entered.

§ 7.459 *Station identification.* For the purpose of station identification, the provisions of paragraph (a) of § 8.364 (Part 8 of the Commission's rules) shall apply to marine fixed stations.

§ 7.460 *Procedure in testing.* For the purpose of conducting operational or maintenance tests, the provisions of paragraph (a) of § 8.365 (Part 8 of the Commission's rules) shall apply to marine fixed stations.

§ 7.461 *Operating procedure.* In the use and operation of marine fixed stations, these stations shall be governed by the provisions of paragraph (a) and (h) of § 8.366 (Part 8 of the Commission's rules).

MARINE RECEIVER-TEST STATIONS [2]

§ 7.471 *Eligibility requirements.* An authorization for a marine receiver-test station may be granted to the licensee of a public coast station using telephony and having a frequency assignment for this purpose within the frequency band 2000 kc to 3500 kc or 156.35 Mc to 162.05 Mc.

§ 7.472 *Scope of service.* A marine receiver-test station shall be used solely for brief transmissions intended for interception by the regularly used radiotelephone receiving apparatus of an associated public coast station of the same station licensee; the purpose of such transmissions shall be limited to necessary determinations of the technical performance of such receiving apparatus. No other signals or communications shall be transmitted by marine receiver-test stations.

§ 7.473 *Assignable frequencies.* The carrier frequency or frequencies assignable to a marine receiver-test station is (are) the specific carrier frequency or frequencies within the band 2000 kc to 3500 kc or 156.35 Mc to 162.05 Mc used by public ship stations in transmitting by means of telephony to the particular public coast station with which the marine receiver-test station is associated; these frequencies with respect to ship stations of the United States, are designated in §§ 8.354 and 8.356 of the Commission's rules.

§ 7.474 *Technical requirements.* The authorized frequency tolerance, authorized class of emission, authorized emission-bandwidth, and authorized transmitter power for marine receiver-test stations is set forth in Subpart E of this part.

§ 7.475 *Station identification.* The official call sign and the general geographic location of the marine receiver-test station shall be announced at the conclusion of each completed test transmission.

§ 7.476 *Operating limitations.* The station licensee shall exercise such control over the transmissions of a marine receiver-test station as is necessary to avoid interference to calls from ship stations and to the exchange of public correspondence between ship and shore. The maximum amount of transmission time permitted on any one radio-channel authorized for use by a particular marine receiver-test station shall not exceed 12 minutes in each 24-hour period.

§ 7.477 *Station records.* (a) An accurate log shall be maintained with respect to the operation of each marine receiver-test station. The station licensee shall be responsible for compliance with this requirement. This log may be maintained and located at an authorized control point associated with the station.

(b) All log entries shall be made by the licensed operator responsible for operation of the station or by a person authorized and directed by the station licensee to make such entries.

(c) The log shall be maintained and entries made therein as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include the date(s) and time(s) of operation of the station; official call sign of the station, the name and signature of the licensed operator who is responsible for operation of the station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may effect the proper operation of the

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[2] This class of station is defined by paragraph (h) of § 7.5.

station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(3) All radiotelephone distress urgency or safety signals and comunications made or intercepted; the complete text, if possible, of such comunications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio-channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined.

(4) Whenever interference to other stations is reported to the station licensee or to the responsible operator, an entry shall be made by the latter to that effect, stating the source of the interference report and the station(s) to which interference has been caused, if known.

(5) All test transmissions shall be entered, including the date, time, duration of the transmission, the class of emission and particular radio-channel used.

(6) The date and time of making each entry shall be shown opposite the entry and the time shall be expressed in local standard time as follows. The first entry in each hour shall consist of four figures (from 00:00 to 24:00 beginning at midnight local standard time); additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation e. s. t., c. s. t., etc., shall be marked at the head of the column in which time is entered.

MARINE CONTROL STATIONS, MARINE REPEATER STATIONS, AND MARINE RELAY STATIONS [3]

§ 7.481 *Eligibility requirements.* Authorizations for marine control stations, marine repeater stations, and marine relay stations will be issued only to licensees of coast stations who have made a satisfactory showing of need therefor in relation to the particular coast station or stations of which they are the station licensee.

§7.482 *Showing of need.* Applicants for such authorization must show that (a) a need exists for a point-to-point radio circuit for control, repeater, or marine-relay purposes, (b) that telecommunication facilities other than a marine control, marine repeater, or marine-relay station are not available, or if available would not provide effective results, and (c) that the service to be rendered through use of the marine control station, marine repeater, or marine-relay station is necessary for, or will prove beneficial to, the service rendered by the associated coast station(s).

§ 7.483 *Points of communication.* (a) Marine control stations are authorized to transmit exclusively to the particular coast station whose operation or emission is being controlled by such transmissions.

(b) Marine repeater stations are authorized to transmit exclusively to other authorized marine repeater stations, or to designated radio receiving locations to which the respective transmitted communication is addressed, or to an authorized message center at a designated fixed location.

(c) Marine relay stations are authorized to transmit to and receive from other authorized marine relay stations as specified in the station authorization.

§ 7.484 *Frequencies assignable.* In any area in the continental United States, a maximum of four carrier frequencies assignable in accordance with Part 2 of the Commission's rules within either or both of the bands 72.02 Mc to 74.58 Mc and 75.42 Mc to 75.98 Mc are available in the aggregate for use by marine control stations, marine repeater stations and marine relay stations on condition that harmful interference shall not be caused to:

(a) Reception by the general public of emissions from television stations on television channels 4 and 5.

(b) The service of existing and previously authorized marine control stations, marine repeater stations, or marine relay stations.

(c) The service of existing and previously authorized stations operating in any aviation service.

Pursuant to Part 2 of the Commission's rules, assignable frequencies for this purpose are spaced 40 kc apart, beginning with the frequencies 72.02 Mc and 75.42 Mc and ending with the frequencies 74.58 Mc and 75.98 Mc, respectively. Should the Commission find that public interest, convenience, or necessity would be served thereby, licensees of marine control stations, marine repeater stations, and marine relay stations authorized to operate on one or more frequencies within these bands, shall be required to share, on a coordinated non-interference basis, the use of their respective frequency assignments with other licensees using the same frequencies.

§ 7.485 *Technical requirements.* The authorized frequency tolerance, authorized class of emission, authorized emission-bandwidth, and authorized transmitter power for marine fixed stations is set forth in Subpart E of this part.

§ 7.486 *Limitation on stations authorizations.* Pending additional development of the use and operation of marine control, marine repeater, and marine relay stations, and until the necessary scope of service required to be rendered by these classes of stations has been more completely determined, such stations will be authorized exclusively on a developmental basis in accordance with the provisions of Subpart M of this part. In addition to the provisions of this subpart, the relevant conditions and limitations set forth in Subpart M shall apply to these classes of stations.

SUBPART M—DEVELOPMENTAL STATIONS

§ 7.501 *Supplemental eligibility.* An authorization for developmental operation of a station in any of the services under this part will be issued only to those persons who are eligible to operate such stations on a regular basis.

§ 7.502 *Showing and statement required.* (a) Except as provided in paragraph (c) of this section, each application for authorization for a developmental station shall be accompanied by a showing that:

(1) The applicant has an organized plan of development leading to a specific objective,

(2) A point has been reached in the program where actual transmission by radio is essential to the further progress thereof,

(3) The program has reasonable promise of substantial contribution to the expansion or extension of the use of radio for a maritime purpose, or is in a field of maritime operation not already investigated,

(4) The program will be conducted by qualified personnel,

(5) The applicant is legally and financially qualified, and possesses adequate technical facilities for conduct of the program as proposed,

(6) The public interest, convenience, or necessity will be served by the proposed operation.

(b) Every application for authority to engage in developmental operation shall be accompanied by a statement signed by the applicant in which it is agreed that any authorization issued pursuant thereto will be accepted with the express understanding of the applicant that it is subject to change in any of its terms or to cancellation in its entirety at any time, upon reasonable notice but without a hearing, if, in the opinion of the Commission, circumstances should so require.

(c) The provisions of paragraph (a) of this section do not apply when an application is made for a developmental station solely for the reason that the frequency requested is restricted to such developmental use.

§ 7.503 *Assignable frequencies.* (a) Stations engaged in developmental operation may be authorized to use a frequency or frequencies, available for the service and class of station which they propose to operate. The number of frequencies assignable to a particular station shall depend upon the specific requirements of the developmental program and the number of frequencies available for such use in the particular area where the station is to be operated.

(b) In addition to the specific frequencies and frequency bands designated in this part as available for a particular service and class of station, each of the following frequencies and frequency bands may be licensed as an assigned frequency or as an authorized frequency band, respectively, for use by developmental stations subject to the applicable provisions of this part as follows:

Available for coast stations and marine-utility stations

156.7 Mc
156.9 Mc

Available for coast stations

3,500-3,700 Mc
6,425-6,575 Mc
11,700-12,200 Mc

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[3] These classes of stations are defined in paragraphs (e), (f) and (g) of § 7.5.

Available for coast stations and fixed stations

26,000–30,000 Mc

and

2,450–2,500 Mc
16,000–18,000 Mc

on condition that no protection shall be given from interference caused by emissions from industrial, scientific or medical equipment.

Available for operational fixed stations

952– 960 Mc	2,500– 2,700 Mc
1,850–1,990 Mc	6,575– 6,875 Mc
2,110–2,200 Mc	12,200–12,700 Mc

The class of emission, the frequency tolerence, the emission bandwidth, and the maximum transmitter power for use on the foregoing frequencies which are above 2400 Mc shall be designated in each station authorization.

§ 7.504 *Use of developmental stations.* (a) Developmental stations shall be constructed and used in such manner as to conform with all applicable technical and operating requirements[1] contained in this part, unless deviation therefrom is specifically provided in the station authorization.

(b) Communication with any station of a country other than the United States is prohibited unless specifically authorized by the terms of the station authorization.

(c) The operation of a developmental station is subject to the condition that harmful interference is not caused to the operation of stations licensed in an established service under any part of the Commission's rules.

§ 7.505 *Developmental program.* (a) The developmental program as described by the applicant in the application for authorization shall be substantially followed unless the Commission shall otherwise direct.

(b) Where some phases of the developmental program are not covered by the general rules of the Commission and the rules in this part, the Commission may specify supplemental or additional requirements or conditions in each case as deemed necessary in the public interest, convenience or necessity.

(c) The Commission may, from time to time, require a station engaged in developmental work to conduct special tests which are reasonable and desirable to the authorized developmental program.

§ 7.506 *Report of operation required.* A report on the results of the developmental program shall be filed with and made a part of each application for renewal of authorization, or in cases where no renewal of authorization is requested, such report shall be filed within 60 days of the expiration of such authorization. Matters which the applicant does not wish to disclose publicly may be so labeled; they will be used solely for the Commission's information and will not be publicly disclosed without permission of the applicant. The report shall include comprehensive and detailed information on the following:

(a) The final objective of the developmental operation.

(b) Pertinent results of operation to date.

(c) Analysis of the results obtained.

(d) Copies of any published reports.

(e) Need for continuation of the program if such need exists.

(f) Number of hours of operation on each authorized frequency during the term of the license to the date of the report.

§ 7.507 *Identification of station.* (a) The radiotelegraph and radiotelephone emissions of a developmental station shall be clearly identified in the manner provided for the corresponding established class of station.

(b) The facsimile emissions of a developmental station shall be identified either by telegraphy or by telephony as provided in paragraph (a) of this section.

(c) All other classes of emission of a developmental station shall be identified as prescribed in the respective station authorization.

SUBPART N—VIOLATIONS

§ 7.551 *Answers to notice of violation.* (a) Any person receiving official notice of a violation of the terms of the Communications Act, any legislative act, Executive order, treaty to which the United States is a party, terms of a station or operator license, or the rules and regulations of the Federal Communications Commission, shall, within 3 days from such receipt, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent, or an acknowledgment made within such 3-day period, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. The answer shall contain a full explanation of the incident involved and shall set forth the action taken to prevent a continuation or recurrence thereof. If the notice relates to lack of attention to, or improper operation of the station, or to log or watch discrepancies, the answer shall give the name and license number of the licensed operator on duty.

§ 7.552 *Reports of infringements of the International Radio Regulations.* In the event that infringement of the International Radio Regulations by a foreign station is detected, report thereof may be made by the submission to the Commission of a form similar to that set forth in Appendix 2 of the International Radio Regulations.

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[1] Such requirements are those applicable to the corresponding established class of station including provisions relating to operator requirements, station logs, station documents, assignment of call signs.

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§ 8.1 *Basis and purpose.* (a) The basis for the rules following in this part is The Communications Act of 1934, as amended, and applicable treaties and agreements to which the United States is a party.

(b) The purpose of the rules and regulations in this part is to prescribe the manner in which parts of the radio spectrum may be made available for radiocommunication and radiolocation for maritime operations which require radio transmitting facilities on board ship and, for certain maritime communications, on board aircraft; and to prescribe, in so far as is necessary to carry out the provisions of statute and applicable treaties and agreements relative to radio operators and radio installations on board ships for safety purposes, the details as to location, manner of installation, use and availability, of the required equipment, apparatus, spare parts, and such supplementary equipment as may be necessary for the proper functioning of the required shipboard radio installations for the proper conduct of radio communication in time of emergency or distress. For the purposes of this part, the following definitions shall be applicable.[1]

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[1] For other definitions, refer to Part 2, rules governing frequency allocations and treaty matters; general rules and regulations; Part 7, rules governing stations on land in the maritime services; and Part 14, rules governing stations in Alaska in the Maritime services.

SUBPART A—DEFINITION OF TERMS

§ 8.2 *General*—(a) *Commission.* The term "Commission" means the Federal Communications Commission.[2]

(b) *Statutes and international agreements*—(1) *Communications Act.* The Communications Act of 1934, as amended.

(2) *Ship Act.* The act approved June 24, 1910, as amended, requiring apparatus and operators for radio communication on certain Great Lakes steamers.

(3) *Safety Convention.* The International Convention for the Safety of Life at Sea, in force, including the Regulations annexed thereto.[3]

(4) *International Radio Regulations.* The Radio Regulations in effect, annexed to the International Telecommunication Convention (Atlantic City, 1947); and the General Radio Regulations (revision of Cairo, 1938) in effect, annexed to the International Telecommunication Convention (Madrid, 1932). For the purpose of this part, the term "International Radio Regulations" shall be synonymous with the term "International General Radio Regulations."

(5) *Region 1, Region 2, and Region 3.* These geographic areas defined as "Region 1", "Region 2", and "Region 3" in Article 5, paragraph 3, of the Radio Regulations of Atlantic City, 1947.

(c) *Telecommunications.* Any transmission, emission or reception of signs, signals, writing, images, and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.

(d) *Radiocommunication.* Any telecommunication by means of Hertzian waves.

(e) *Public correspondence.* Any telecommunication which the offices and stations, by reason of their being at the disposal of the public, must accept for transmission.

(f) *Station.* A separate radio transmitter, or a combination of radio transmitter(s) and radio receiver(s), including the accessory equipment required for carrying on a definite radiocommunication service.

(g) *Station authorization.* Any valid station license or special temporary authority for use of a station, issued by the Commission.

(h) *Person.* An individual, partnership, association, joint stock company, trust, or corporation.

(i) *Station licensee.* The holder of a valid station license.

(j) *Operator licensee.* The holder of a valid license or valid permit for the actual operation of a licensed station.

(k) *Hours of service.* The period of time during each calendar day when a station is available, in conformity with the terms of the station authorization, for the rendition of its normal service.

(l) *Day.* (1) Where the word "day" is applied to the use of a specific frequency-assignment or to a specific authorized transmitter power, such use of the word "day" shall be construed to mean transmission on such frequency-assignment or with such authorized transmitter power during that period of time included between one hour after local sunrise and one hour before local sunset.

(2) Where the word "day" occurs in reference to the provisions of section 353, subsection (c), of the Communications Act or the radio provisions of the Safety Convention, such use of the word "day" shall be construed to mean the calendar day, from midnight to midnight, local time.

(m) *Radio district.* A prescribed geographic area within the United States which, for the purpose of official inspection of radio stations in behalf of the Commission, is under the jurisdiction of a Commission engineer-in-charge whose official address and the specific area of inspection associated therewith are designated by Appendix I of this Part.[4]

(n) *Ship or vessel.* "Ship" or "Vessel" includes every description of watercraft or other artificial contrivance, except aircraft, used or capable of being used as a means of transportation on water, whether or not it is actually afloat.

(o) *Categories of ships.* (1) Where use of the term "passenger ship" or "cargo ship" occurs in reference to the provisions of Part II of Title III of the Communications Act, such use of the term shall be construed as follows: A ship is a passenger ship if it carries or is licensed or certificated to carry more than twelve passengers. A cargo ship is any ship not a passenger ship.

(2) Where use of the term "passenger ship" or "cargo ship" occurs in reference to the radio provisions of the Safety Convention, such use of the term shall be construed as follows: A ship is a passenger ship if it carries more than twelve passengers. A cargo ship is any ship not a passenger ship.

(3) A commercial transport vessel is any ship or vessel which (i) is used in commerce for transporting passengers or goods to or from any harbor(s) or port(s), or between terminals within a particular harbor or port area, or (ii) is used primarily in connection with the construction, modification or construction, maintenance, repair, loading, unloading, movement, or piloting of one or more vessels of subdivision (i) of this subparagraph.

(p) *Safety Convention certificates*—(1) *Exemption certificate.* A certificate issued to a ship which is granted exemption from applicable provisions of the Safety Convention.

(2) *Safety certificate.* A certificate issued upon application, after inspection and survey by proper authorities, to a passenger ship which complies in an efficient manner with the requirements of the Safety Convention.

(3) *Safety radiotelegraphy certificate.* A certificate issued upon application, after inspection by proper authorities, to a cargo ship which complies in an efficient manner with the requirements of the Safety Convention.

§ 8.3 *Maritime mobile service*—(a) *Mobile service.* A service of radiocommunication between mobile and land stations, or between mobile stations.

(b) *Maritime mobile service.* A mobile service between ship stations and coast stations, or between ship stations.[5]

(c) *Mobile station.* A station in a mobile service intended to be used while in motion, or during halts at unspecified points.

(d) *Ship station.* A mobile station in the maritime mobile service located on board a vessel which is not permanently moored.

(e) *Public ship station.* (1) A ship station open to public correspondence.

(2) Public ship stations authorized to employ telegraphy for public correspondence are further classified according to their hours of service as designated herewith:

First class. These stations carry on a continuous service of public correspondence.

Second class. These stations carry on a designated service of public correspondence of prescribed but limited duration; at least during the period designated for ship stations of the second category by the International Radio Regulations or, in the case of voyages of short duration, as otherwise designated by the Commission in accordance with those regulations.

Third class. These stations carry on a service of public correspondence, the duration of which is prescribed but is less than that of stations of the Second Class, or is not prescribed but is determined by the master of the vessel pursuant to his authority under section 358 of the Communications Act.

(f) *Limited ship station.* A ship station not open to public correspondence.

(g) *Marine-utility station.* A station in the maritime mobile service, readily portable for use as a limited coast station at unspecified points ashore within a designated local area, or for use as a limited ship station on mobile vessels within a designated local area.

§ 8.4 *Maritime radiolocation service*—(a) *Radiolocation.* Determination of a position or of a direction by means of the constant velocity or rectilinear propagation properties of Hertzian waves.

(b) *Radiolocation service.* A service involving the use of radiolocation.

(c) *Maritime radiolocation service.* A radiolocation service intended for the benefit of ships.

(d) *Radiolocation station.* A station in the radiolocation service.

(e) *Radiolocation mobile station.* A station in the radiolocation service intended to be used while in motion or during halts at unspecified points.

(f) *Ship-radiolocation station.* A radiolocation mobile station located on board a ship and used solely for maritime radiolocation service.

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[2] The address of the Commission's principal office is "Federal Communications Commission, Washington 25, D. C."

[3] The International Convention for the Safety of Life at Sea, London, 1929, became effective for the United States on November 7, 1936. It is expected that this Convention will be superseded by the International Convention for the Safety of Life at Sea, London, 1948; pertinent information may be obtained by inquiry to the Commission.

[4] This will be identical with appendix attached to Part 12 (47 CFR Part 12).

[5] Aircraft stations, when transmitting on designated frequencies allocated to the maritime mobile service, may communicate in this service with ship stations and coast stations.

(g) *Radionavigation.* Radiolocation intended solely for the determination of position or direction or for obstruction warning in navigation.

(h) *Radionavigation service.* A radiolocation service involving the use of radionavigation.

(i) *Maritime radionavigation service.* A radionavigation service intended for the benefit of ships.

(j) *Radionavigation station.* A station in the radionavigation service.

(k) *Radionavigation mobile station.* A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.

(l) *Ship-radionavigation station.* A radionavigation mobile station located on board a ship and used solely for maritime radionavigation service.

(m) *Radar.* A radiolocation system where transmission and reception are carried out at the same location, and which utilizes the reflecting or retransmitting properties of objects in order to determine their positions.

(n) *Primary radar.* Radar using reflection only.

(o) *Secondary radar.* Radar using automatic retransmission on the same or on a different radio frequency.

(p) *Ship-radar station.* A ship-radionavigation station[*] utilizing radar for the purpose of detecting above-water objects, with a determination of their direction and distance from the ship.

(q) *Radio direction-finding.* Radiolocation in which only the direction of a station is determined by means of its emissions.

(r) *Radio direction-finding station.* A radiolocation station intended to determine only the direction of other stations by means of transmissions from the latter.

(s) *Direction finder (radio compass).* Apparatus capable of receiving clearly perceptible radio signals and capable of taking bearings on these signals from which the true bearing and direction of the point of origin of such signals with respect to the point of reception may be determined.

(t) *Direction finder receiver.* A radio receiver which is a component of a radio direction finder.

(u) *Marine radiobeacon station.* A radionavigation land station, the emissions of which are intended to enable a ship station to determine its bearing or its direction in relation to the marine radiobeacon station.

§ 8.5 *Developmental maritime stations on board ship*—(a) *Developmental mobile station.* A mobile station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the nongovernment mobile service which has been specifically allocated the authorized frequency (or frequencies) of the developmental mobile station.

(b) *Developmental radiolocation station.* A radiolocation station operated for the express purpose of developing equipment or a technique solely for use only in that portion of the nongovernment radiolocation service (including the nongovernment radionavigation service) which has been specifically allocated the authorized frequency (or frequencies) of the developmental radiolocation station.

(c) *Classification.* The classes of developmental stations on board ships in the maritime mobile service and in the maritime radiolocation service are the same as the classes defined in preceding sections; however, for purposes of identification, the particular class of station is followed by the parenthetical indicator "(developmental)"; for example, "limited ship station (developmental)".

§ 8.6 *Operational*—(a) *Safety communication.* The transmission or reception of distress, alarm, urgent, or safety signals, or any form of radiocommunication which, if delayed in transmission or reception, may adversely affect the safety of life or property; and occasional transmission or reception as necessary for determining whether or not the radio equipment is in good working condition for purposes of safety.

(b) *Superfluous radiocommunication.* Any transmission that is not necessary in properly carrying on the service for which the station is licensed.

(c) *Harmful interference.* Any radiation or any induction which endangers the functioning of a radionavigation service or of a safety service, or obstructs or repeatedly interrupts a radio service operating in accordance with law.

(d) *Distress signal.* (1) The distress signal is the radiotelegraph or radiotelephone signal which indicates that a ship, aircraft, or other vehicle is threatened by grave and imminent danger and requests immediate assistance.

(2) In radiotelegraphy, the international distress signal consists of the group "three dots, three dashes, three dots", transmitted as a single signal in which the dashes are emphasized so as to be distinguished clearly from the dots.

(3) In radiotelephony, the international distress signal consists of the word "MAYDAY" pronounced as the French expression "m'aider".

(e) *Alarm signal.* The international radiotelegraph signal, consisting of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second, having for its sole purpose the actuation of automatic devices giving warning by means of an alarm that a distress call or message is about to follow, or that an urgent cyclone warning is about to be sent by a coast station authorized to do so.

(f) *Urgency signal.* (1) The urgency signal is the radiotelegraph or radiotelephone signal which indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or of some person on board or within sight.

(2) In radiotelegraphy, the international urgency signal consists of three repetitions of the group "XXX", sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international urgency signal consists of three repetitions of the word "PAN" pronounced as the French word "panne" and sent before the call.

(g) *Safety signal.* (1) The safety signal is the radiotelegraph or radiotelephone signal which indicates that the station sending this signal is ready to transmit a message concerning the safety of navigation or giving important meteorological warnings.

(2) In radiotelegraphy, the international safety signal consists of three repetitions of the group "TTT," sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international safety signal consists of three repetitions of the French word "securite," sent before the call.

(h) *Distress traffic.* All messages relative to the immediate assistance required by the ship, aircraft, or other vehicle in distress.

(i) *500 kilocycles silent period.* The three-minute period twice an hour beginning at x h 15 and x h 45, Greenwich mean time (GMT), during which the International Radio Regulations require that all transmissions (except for certain emissions designated in those regulations) must cease on all frequencies within a designated frequency-band centered on 500 kc.

(j) *Watch.* The act of listening for or to sound produced by a telephone receiver when the electric wave energy at audio frequency supplied to the telephone receiver:

(1) Results from simultaneous interception and detection of Hertzian waves of a designated radio frequency or frequencies, and

(2) Is substantially equivalent in frequency to the audio frequency or frequencies generated by detection of the intercepted Hertzian waves.

(k) *Calling.* Transmission from a station solely to secure the attention of another station, or other stations, for a particular purpose.

(l) *Working.* Radiocommunication carried on, for a purpose other than calling, by any station or stations using telegraphy, telephony, or facsimile.

§ 8.7 *Technical*—(a) *Radio frequency.* Any frequency between 10 kilocycles per second and 3,000,000 megacycles per second.

(b) *Audio frequency.* A frequency corresponding to the frequency of a normally audible sound wave, usually between 20 and 15,000 cycles per second.

(c) *Hertzian waves.* Electromagnetic waves of frequencies between 10 kc and 3,000,000 Mc.

(d) *Emission.* Any radiation of energy by means of Hertzian waves.

(e) *Spurious emission.* Any emission from a station at a frequency or frequencies outside an authorized frequency-band.

(f) *Telegraphy.* A system of telecommunication for the transmission of written matter by the use of a signal code.

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[*] Where reference is made, in official documents issued by the Commission prior to the effective date of this section, to ship-radar stations in the "ship service", the term "ship service" shall be construed, with respect to such stations, to mean "maritime radionavigation service".

(g) *Telephony.* A system of telecommunication set up for the transmission of speech, or in some cases, other sounds.

(h) *Facsimile.* A system of telecommunication for the transmission of fixed images with a view to their reception in a permanent form.

(i) *Carrier frequency.* The frequency of the carrier.[7]

(j) *Authorized carrier frequency.* A specific carrier frequency authorized for use by a station, from which the actual carrier frequency is permitted to deviate, solely because of frequency instability, by an amount not to exceed the frequency tolerance.

(k) *Frequency tolerance.* The extent to which a carrier frequency (or when a carrier is not present, a frequency coinciding with the center of an emission-bandwidth) is permitted by applicable regulations, or by the terms of a station authorization, to depart, solely because of frequency instability, from the authorized carrier frequency (or, when a carrier is not present, from the assigned frequency).

(l) *Frequency-band.* A continuous range of frequencies extending between two designated limiting frequencies.

(m) *Bandwidth.* The number of cycles or kilocycles per second expressing the difference between the limiting frequencies of a frequency-band.

(n) *Radio-channel.* A frequency-band, sufficient in width to permit its use for radiocommunication, comprised of the emission-bandwidth, the interference guard bands, and the frequency tolerance.

(o) *Emission-bandwidth.* The bandwidth effectively occupied by the emission of a radio-channel (the band of frequencies comprising 99 per cent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 per cent of the total radiated power).[8]

(p) *Interference guard bands.* The two frequency-bands additional to, and on either side of, the authorized frequency-band, which may be provided to minimize the possibility of interference between different radio-channels.

(q) *Authorized emission-bandwidth.* A specific emission-bandwidth authorized for use by a station.

(r) *Authorized frequency-band.* A frequency-band authorized for use by a station.

(s) *Assigned frequency.* The frequency coinciding with the center of the frequency-band in which the station is authorized to work; this frequency does not necessarily correspond to any frequency in an emission.[9]

(t) *Frequency assignment.* The specific frequency or frequencies authorized for the emission(s) of a particular station; expressed for each radio-channel by

(1) The authorized carrier frequency, the frequency tolerance, and the authorized emission-bandwidth in relation to the authorized carrier frequency, or

(2) The authorized emission-bandwidth in reference to a specific assigned frequency (when a carrier does not exist), or

(3) The authorized frequency-band (when a carrier does not exist).

(u) *Modulation.* The process of producing a wave some characteristic of which varies as a function of the instantaneous value of another wave, called the modulating wave.

(v) *Modulation factor.* (1) In an amplitude-modulated wave, the ratio of half the difference between the maximum and minimum amplitudes to the average amplitude.

(2) In a frequency-modulated wave, the ratio of the actual frequency swing to the frequency swing defined as 100 percent modulation.

(w) *Percentage modulation.* The modulation factor expressed in percent.

(x) *Amplitude modulation (AM).* Modulation in which the amplitude of a wave is the characteristic subject to variation.

(y) *Frequency modulation (FM).* Modulation in which the instantaneous frequency of a sine-wave carrier[10] is caused to depart from the carrier frequency by an amount proportional to the instantaneous value of the modulating wave.

(z) *Frequency deviation.* In frequency modulation, the peak difference between the instantaneous frequency of the modulated wave and the carrier frequency.

(aa) *Frequency swing.* In frequency modulation, the peak difference between the maximum and the minimum values of the instantaneous frequency.

(bb) *Deviation ratio.* In frequency modulation, for a sinusoidal modulating wave, the ratio of the frequency deviation to the frequency of the modulating wave.

(cc) *Antenna (aerial).* A means for radiating or intercepting Hertzian waves.

(dd) *Artificial antenna (dummy antenna).* A device which has the equivalent impedance characteristics of an antenna and the necessary power-handling capabilities, but which does not radiate or intercept Hertzian waves.

(ee) *Last radio stage.* In an electron-tube radio transmitter, the radio-frequency oscillator or power amplifier stage which supplies all radio-frequency power to the antenna, either directly or through the medium of a transmission line.

(ff) *Plate (anode) input power.* The electrical power delivered to the plate (anode) of an electron tube by the source of supply; this power being the product of the effective anode voltage and the effective anode current.

(gg) *Antenna power.* The power supplied by a particular radio transmitter to the antenna used in connection with that transmitter, at a radio frequency or frequencies within an authorized frequency-band.

(hh) *Radiated power.* Energy, in the form of Hertzian waves, radiated from an antenna.

(ii) *Authorized transmitter - power.* The power of a particular transmitter as designated in the respective station license or construction permit or in lieu thereof, the power designated in the applicable rule(s) or regulation(s). Unless specifically expressed otherwise, this power is the total plate input power to all electron tubes of the last radio stage of the transmitter which are used to supply radio-frequency power to the antenna, measured as prescribed in § 8.134.

(jj) *Crystal oscillator.* A generator of alternating-current energy, the frequency of which is determined by the mechanical properties of a piezoelectric crystal.

(kk) *Telephone receivers.* Whenever use of the following terms occurs in reference to "watch" as defined in paragraph (j) of § 8.6, such use of these terms shall be construed as follows:

(1) *Telephone receiver.* Any instrument used to convert energy consisting of electric waves at audio frequency into energy consisting of substantially equivalent sound waves.

(2) *Hand receiver.* A telephone receiver capable of being held to the ear by the hand and normally used in that manner.

(3) *Head receiver.* A telephone receiver capable of being held to the ear by an attached headband and normally used in that manner.

(4) *Loudspeaker.* A telephone receiver capable of effectively radiating acoustic power for reception by ear at a distance and normally used for that purpose.

(ll) *Energize.* The term "energize", as applied in this part to transmitters, receivers, and other component equipment of ship radio installations required for safety purposes, means to supply with power as necessary to provide normal and effective operation of such equipment.

§ 8.8 *Installation for safety communication*—(a) *Main antenna.* An antenna installed in a fixed position on board a ship, and regularly available for use in connection with a main installation on the same ship.

(b) *Main radio transmitter.* A radio transmitter regularly available in a ship station for safety communication which is energized ordinarily by a source of power other than the emergency power supply.

(c) *Main radio receiver.* A radio receiver regularly available in a ship station for safety communication which is energized ordinarily by a source of power other than the emergency power supply.

(d) *Main power supply.* A normally available source of power on board a ship capable of simultaneously energizing all other components of the main installation.

(e) *Main installation.* A radio installation on board a vessel; including a main antenna, a main transmitter, a main receiver, and a main power supply; independent of any emergency or reserve installation and capable of being used for safety communication with other stations in the maritime mobile service.

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[7] For the definition of "carrier", see paragraph (a) of § 2.3 of this chapter.

[8] This definition coincides with the definition of "Bandwidth Occupied by an Emission", which appears as paragraph 58 of the International Radio Regulations of Atlantic City, 1947. The emission-bandwidth is dependent upon the class of emission and the speed of signalling.

[9] This definition coincides with the definition of "Frequency Assigned to a Station" which appears as paragraph 57 of the International Radio Regulations of Atlantic City, 1947.

[10] For the definition of "carrier," see paragraph (a) of § 2.3 of this chapter.

(f) *Emergency antenna.* An antenna installed in a fixed position on board a ship, separate from and independent of any other antenna(s) on the same ship, and immediately available for use in connection with an emergency or reserve installation on the same ship.

(g) *Emergency radio transmitter.* A radio transmitter immediately available in a ship station for safety communication and capable of being energized solely by the emergency power supply.

(h) *Emergency radio receiver.* A radio receiver immediately available in a ship station for safety communication and capable of being energized solely by the emergency power supply.

(i) *Emergency power supply.* An immediately available source or sources of power on board a ship, independent of the propelling power of the ship and any other electrical system, capable of simultaneously energizing all other components of the emergency or reserve installation.

(j) *Emergency or reserve installation.* A radio installation on board a vessel; including an emergency antenna, an emergency radio transmitter, an emergency radio receiver, emergency electric lights, and an emergency power supply; capable of being used, when energized solely by its emergency power supply, for safety communication with other stations in the maritime mobile service.

(k) *Automatic alarm receiver.* A complete receiving, selecting, and warning device capable of being actuated automatically by intercepted radio-frequency waves forming the international automatic alarm signal, as this signal is specified by the International Radio Regulations.

(l) *Auto-alarm.* An automatic alarm receiver approved as specified by the provisions of section 3 (x) of the Communications Act.

(m) *Automatic-alarm-signal keying device.* A device capable of automatically keying a radiotelegraph transmitter so as to transmit the international automatic-alarm signal, as this signal is specified by the International Radio Regulations.

SUBPART B—APPLICATIONS

§ 8.21 *Authorization required for operation of a radio station.* Radio stations required by the Communications Act to be licensed shall not be operated in the maritime mobile service or in the maritime radiolocation service (including the maritime radionavigation service) except under and in accordance with a valid station authorization therefor granted by the Commission.[1] Further, the operation of such apparatus shall be in conformity with the provisions of statute, international treaty or agreement, and the rules of the Commission relative to the licensing of operators.

§ 8.22 *Administrative classification of stations.* (a) Stations in the maritime mobile service subject to this part are licensed according to the class of station normally as designated below:

(1) Public ship stations authorized to employ telegraphy for public correspondence:

(i) First class;

(ii) Second class;

(iii) Third class;

(2) Public ship stations not authorized to employ telegraphy;

(3) Limited ship stations;

(4) Maritime utility stations.

(b) Public ship stations not authorized to employ telegraphy for public correspondence are licensed as public ship stations (one class) without distinction relative to hours of service for public correspondence.

(c) Limited ship stations are licensed (one class) without distinction relative to hours of service.

(d) One ship station license is issued in behalf of one station licensee to authorize the operation of a ship station which is within more than one class as enumerated in paragraph (a) of this section. In all such cases, if the station, by reason of any portion of its use or operation, comes within the definition of a public ship station (as defined by paragraph (e) of § 8.3), it is licensed as a public ship station; if the station is authorized to employ telegraphy for public correspondence, it is further classified in accordance with paragraph (a) (1) of this section.

(e) Stations in the maritime radiolocation service subject to this part (other than those exclusively in the maritime radionavigation service) are licensed according to the class of station, normally as designated below:

(1) Ship radiolocation stations.

(f) Stations in the maritime radionavigation service subject to this part are licensed according to the class of station, normally as designated below:

(1) Ship radionavigation stations;

(2) Ship radar stations.

§ 8.23 *Statutory eligibility for station license.* Section 310 of the Communications Act places the following express limitations on the granting and holding of station licenses:

(a) A station license shall not be granted to or held by:

(1) Any alien or the representative of any alien;

(2) Any foreign government or the representative therof;

(3) Any corporation organized under the laws of any foreign government;

(4) Any corporation of which any officer or director is an alien;

(5) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government, or representative thereof, or by any corporation organized under the laws of a foreign country;

(6) Any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourh of the directors are aliens, if the Commisison finds that the public interest will be served by the refusal or revocation of such license; or

(7) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representatives thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

(8) Nothing in the foregoing paragraph shall prevent the licensing of radio apparatus on board any vessel, aircraft, or other mobile station of the United States when the installation and use of such apparatus is required by Act of Congress or any treaty to which the United States is a party.

§ 8.24 *Application precedent to authorization.* Except as otherwise provided in §§ 8.26 and 8.42, no authorization will be granted for use or operation of any radio station on board ship in any service governed by this Part unless formal written application therefor in proper form[2] first is filed with the Commission at its offices in Washington 25, D. C. Except as provided in paragraphs (c) and (f) of § 8.42, an application in writing should be filed at least sixty days prior to the earliest date on which it is desired that the requested authorization be granted by the Commission, in order that action therein may be taken by that date. Each application shall be specific and complete with regard to the information requested in the application form, or otherwise specifically requested by the Commission. Unless otherwise specified in a particular case or for a particular form, each application shall be filed in original only.

§ 8.25 *Signature on application.* One copy of each application for an authorization shall be signed under oath or affirmation by the applicant if the applicant be an individual, or any one of the partners if an applicant be a partnership, by an officer if the applicant be a corporation, or by a member who is an officer if the applicant be an unincorporated association: *Provided, however,* That applications may be signed by the attorney for an applicant (a) in case of physical disability of the applicant, or (b) his absence from the continental United States. If it be made by a person other than the applicant, he must set forth in the verification the grounds of his belief as to all matters not stated upon his knowledge and the reason why it is not made by the applicant. Applications filed on behalf of eligible governmental entities such as states and territories of the United States and political subdivisions thereof, the District of

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[1] The Commission has exempted certain low power radio devices from its general licensing requirements as set forth in Part 15, rules governing restricted radiation devices. Licensing procedures and exemptions applicable to radio apparatus used for medical purposes, industrial heating, and other miscellaneous purposes not involving radiocommunication are set forth in Part 18, rules and regulations relating to industrial, scientific and medical service.

[2] Standard forms are prescribed herein for use in connection with the majority of applications submitted for Commission consideration. These forms may be obtained without cost from the Commission at Washington, D. C., or from any of its field offices.

Columbia, and units of local government including incorporated municipalities, shall be signed by such duly elected or appointed officials as may be competent to do so under the law of the jurisdiction. Where more than one copy of an application is required to be filed with the Commission, only the original need to be signed and verified; copies may be conformed.

§ 8.26 *Informal applications.* An application not submitted on a standard form prescribed by the Commission[3] is an informal application. Each informal application shall be submitted in duplicate, normally in letter form, and with the original signed under oath or affirmation. Each application shall be clear and complete within itself as to the facts presented and the action desired.

§ 8.27 *Defective applications.* (a) An application which is not made in accordance with the Commission's rules or other requirements will be considered defective unless accompanied by a request to waive or petition to amend the rule or other requirement with which the application is in conflict. The reasons which are believed to support such a request or petition shall be set forth in detail.

(b) If an applicant is requested by the Commission to file any documents or information not included in the prescribed application form, a failure to comply with such request will constitute a defect in the application.

(c) When an application (other than an application made in an emergency and not in written form) is considered to be incomplete or defective, the Secretary of the Commission will return it to the applicant, unless the Commission may otherwise direct. The reason for return of the application will be indicated, and, if appropriate, necessary additions or corrections will be suggested.

§ 8.28 *Amendment or dismissal of application.* Any application may be amended or dismissed without prejudice upon request of the applicant prior to the time the application is granted or designated for hearing. Each amendment of, or request for dismissal of an application shall be signed, authenticated, and submitted in the same manner and with the same number of copies as required for the original application. All related correspondence or other material which is to be considered as a part of an application already filed shall be submitted in the form of an amendment to the application concerned.

§ 8.29 *Partial grant of application.* Whenever the Commission, without a hearing, grants an application in part, or with any privileges, terms, or conditions other than those requested, the action of the Commission shall be considered as a grant of such application unless the applicant shall, within 20 days from the date on which public announcement of such grant is made, or from its effective date if a later date is specified, file with the Commission a written protest, rejecting the grant as made. Upon receipt of such protest, the Commission will vacate its original action upon the application, if necessary, and set the application for hearing in the same manner as other applications are set for hearing.

§ 8.30 *Request for amendment or waiver of rules.* (a) Any provisions of the rules in this part (except those provisions which set forth specific requirements, not subject to waiver or change, of any applicable statute, or any applicable international agreement to which the United States is a signatory party) may be repealed, amended or supplemented, subject to the provisions of the Administrative Procedures Act. Any interested person may petition for issuance, amendment, or repeal of any rule or regulation governing stations in the maritime mobile or maritime radio location service. Such petition may be filed in relation to specific applications for station authorization, or independently thereof, and shall show the text of the proposed rule(s), and shall set forth the reason(s) in support of the petition.

(b) Any provision of the rules in this part (except these provisions which set forth specific requirements, not subject to waiver or change, of any applicable statute, or any applicable international agreement to which the United States is a signatory party) may be waived by the Commission, if the Commission finds that important or exceptional circumstances require such waiver and that the public interest will be served thereby. A request for such waiver may be filed in relation to specific applications for station authorization, or independently thereof, and shall set forth in detail the reason(s) said waiver is considered to be necessary, and how the public interest would be served thereby.

§ 8.31 *Applications concerning marine-utility stations.* Whenever a marine-utility station is to be used and operated at any location on land (whether or not it is to be used and operated additionally on board mobile vessels), such station is subject to the applicable provisions of Part 7 of the Commission's rules and an application for construction permit to establish such station shall be filed with the Commission, pursuant to the requirements therefor contained in that part.

§ 8.32 *Application for station license.* (a) In accordance with § 8.24, application for station license to authorize the use and operaton of radio transmitting apparatus on board ship shall be submitted on the appropriate Federal Communications Commission Form as prescribed in § 8.36.

(b) Each application for a public ship station license which requests authority to employ telegraphy for public correspondence shall designate the class of station desired to be authorized, in accordance with the terms of paragraph (e) of § 8.3.

§ 8.33 *Changes during license term.* When, during the term of a station license, any change is to be made in respect to the station, or with respect to its use and operation, which would result in a deviation from the terms of the license and/or any supplemental instrument of authorization, application for modification of license on the appropriate FCC Form as prescribed in § 8.36 shall be submitted in accordance with § 8.24 not less than 60 days prior to the date contemplated for such modification of license in order that action therein may be taken by that date.

§ 8.34 *Renewal of license.* Application for renewal of station license shall be submitted on the appropriate FCC Form as prescribed in § 8.36. Unless otherwise directed by the Commission, such application should be filed at least 60 days prior to the expiration date of the license sought to be renewed in order that action therein may be taken by that date.

§ 8.35 *Reinstatement of license.* When the use and operation of a station has been discontinued due to the station license having expired by its own terms, and application for renewal of station license has not been submitted within a period of time acceptable to the Commission for the purpose of renewal, application for station license on the appropriate FCC Form as prescribed in § 8.36 shall, if authority is desired for resumption of operation, be submitted in accordance with § 8.24.

§ 8.36 *Application forms for station authorizations.* (a) The forms hereinafter designated in this Section shall be used for filing formal applications for station authorizations:

(1) For ship stations employing telegraph transmission only, or employing both telegraph and telephone transmission:

For ship station license: FCC Form 501 together with supplementary FCC Form 500.

For modification of ship station license: FCC Form 503 together with supplementary FCC Form 500.

For renewal of ship station license: FCC Form 502.

(2) For ship stations employing radiotelephone transmission (for this purpose, the use of incidental telegraphic emission for calling or operating signals is included in the term "radiotelephone transmission") and for marine-utility stations to be operated on board mobile vessels exclusively:

For ship station license, or renewal or modification thereof: FCC Form 501-A.

(3) For ship stations employing facsimile transmission, composite transmission, or transmission not designated in any of the foregoing categories; and for ship radiolocation or radionavigation stations (other than ship radar stations):

For station license: FCC Form 501.

For modification of station license: FCC Form 503.

For renewal of station license: FCC Form 502.

(4) For ship radar stations:

For license, or renewal or modification thereof: FCC Form 501-B.

(5) For stations on board ship which employ two or more of the foregoing

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[3] Standard forms are prescribed herein for use in connection with the majority of applications and reports submitted for Commission consideration. These forms may be obtained from the Commission at Washington, D. C., or from any of its field offices.

types of transmissions (other than as indicated in subparagraph (1) of this paragraph) and for developmental stations on board ship:

For license, or renewal or modification thereof: each of the form or forms herein specified for the corresponding type or types of transmission.

§ 8.37 *Application for consent to voluntary assignment or transfer of control of station license.* (a) Application for consent to voluntary assignment of a license covering any class of station governed by this part, or for consent to voluntary transfer of control of a corporation holding such license, shall be filed with the Commission on FCC Form 702, "Application for Consent to Assignment of Radio Station Construction Permit or License", or FCC Form 703, "Application for Consent to Transfer of Control of Corporation Holding Construction Permit or Station License", as the case may be, at least 60 days prior to the contemplated effective date of assignment or transfer of control in order that action therein may be taken by that date.

(b) In the case of stations on board ship licensed to operate in any service governed by this part, involuntary assignment of licenses will not be made. Upon the death or legal disability of the licensee, such licenses shall be surrendered for cancellation.

§ 8.38 *Applications filed concurrently.* Applications of different category but in respect to the same station and radio service may be filed concurrently by the same applicant as prescribed herewith:

(a) Applications for modification of station license and for renewal of station license;

(b) Applications for modification of station license and for consent to voluntary assignment or transfer of control of station license;

(c) Applications for renewal of station license and for consent to voluntary assignment or transfer of control of station license.

§ 8.39 *One application for plurality of stations.* (a) One application may be filed for several station authorizations to cover similar stations on board different ships provided the following elements are the same for all stations covered by such application:

(1) Nature of application (license, modification of license, renewal of license, or special temporary authority);

(2) Applicant;

(3) Licensee (when request is for modification or renewal);

(4) Nature of service and class of station as set forth in § 8.22.

(b) Paragraph (a) of this section shall apply only when the individual stations covered by such application are clearly identified therein and properly related to the information supplied which is applicable to the respective authorization requested for each station.

§ 8.40 *Application for station of portable nature (other than marine-utility station).* (a) Upon application as appropriate under §§ 8.26, 8.36 or 8.42 including a supplemental statement as prescribed in subparagraphs (1) and (2) of this paragraph, the Commission may grant a license, modification of license, renewal of license, or special temporary authorization, permitting operation of a station of an established class in the maritime mobile or maritime radiolocation service which is readily portable for use as the occasion requires on board a ship or ships of the United States, provided the applicant makes a satisfactory showing that:

(1) The station will be operated as an established class of station on board ship in conformity with all applicable rules of the Commission, and

(2) Unusual circumstances exist whereby a station license to cover such operation is necessary to eliminate the necessity of frequently filing applications for special temporary authority, licenses, or modifications of license in order to permit on short notice the temporary operation of specified apparatus on board a designated ship or ships of the United States.

§ 8.41 *Application for exceptional authority to communicate with amateur stations.* Upon proper application, including a supplemental statement as herein prescribed, the Commission may grant a license, modification of license, renewal of license, or special temporary authorization, permitting a ship telegraph station on board a vessel not engaged in commerce or a vessel used, or intended to be used, for scientific research or expedition, to transmit by means of Class A1 or A2 emission on authorized ship telegraph frequencies within the band 4000 kc to 25000 kc, for the purpose of exchanging radiotelegraph communications directly with licensed amateur station[4] on land in accordance with the provisions of § 8.70, provided the applicant includes a supplemental statement satisfactorily showing that:

(a) Unusual circumstances during the contemplated voyage(s) are anticipated which will make direct communication with amateur stations extremely beneficial to persons on board the vessel or to the person(s) responsible for the scientific research or expedition for which the vessel is used or is intended to be used;

(b) The messages to be exchanged with amateur stations will contain no material relating directly or indirectly to a commercial transaction; and

(c) Transmission for this purpose will be conducted on a secondary basis so as to avoid interference to commercial message traffic and other authorized emissions of stations operating in the maritime mobile or maritime radiolocation service.

§ 8.42 *Application for special temporary authority.* (a) Upon receipt of application (in written form except as provided in paragraph (f) of this section) therefor, the Commission may issue special temporary authorization for a period not to exceed three months for the use and operation of transmitting apparatus on board ship in the maritime mobile service or the maritime radiolocation service, (provided the proposed operation is not in conflict with the rules and regulations of the Commission) under the following conditions:

(1) In cases which obviously require the immediate use of existing and available radio transmitting apparatus not already authorized for the desired operation;

(2) In cases where an urgent need is shown for operation of an authorized station for a limited time only, in a manner or for a period of time other than that specified in the existing authorization;

(3) For the purpose of conducting a field survey to obtain necessary data in connection with the filing of one or more formal applications. In this case, the authority, if granted, will be for developmental operation only, and these sections of this part applicable to developmental stations on board ship shall apply to all operation under such grant.

(b) Whenever practicable, an application for special temporary authority shall be filed as a formal application on a form or forms prescribed in § 8.36. When necessary, however, such application may be filed as an informal application as prescribed in § 8.26 and paragraph (f) of this section.

(c) An application in written form for special temporary authority shall be filed not less than ten days prior to the earliest date of proposed operation thereunder unless acceptable explanation of reason for failure to meet this time limitation is included with the application.

(d) Each application in written form for special temporary authority submitted by an applicant who holds a valid outstanding authorization or has already filed a formal application, shall contain, as a minimum requirement, the following information, except as to such information already on file with the Commission:

(1) Name and address of applicant.

(2) Official call letters of any valid station authorization or construction permit already held by applicant, and the station location.

(3) Name and official registry number of ship.

(4) Relation of applicant to owner of vessel.

(5) Explanation of need for special temporary authority in lieu of normal type of authorization.

(6) Class of station and nature of service desired.

(7) Complete particulars concerning purpose and nature of proposed operation.

(8) Station(s) with which communication is intended.

(9) Frequency or frequencies, maximum plate input power, and class of emission to be employed.

(10) Equipment to be used, specifying the manufacturer, the date installed, model number, rated power, and frequency stability to be maintained.

(11) The date(s) and time(s) of the proposed operation.

(e) Each application in written form for special temporary authority submitted by an applicant who does **not** hold a valid station license or construction permit issued by the Commission, or has not already filed formal application therefor, shall, in addition to the information required under paragraph (d) of this section, contain factual statements to the extent necessary for the Commission to determine whether or not the granting of the desired authorization will be in accordance with the citizenship eligibility requirements of section 310 of the Communications Act.[3]

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[4] For information concerning amateur stations, see Part 12 of the Commission's rules.

(f) In any case in which the Commission finds an actual emergency to exist, the Commission will normally issue special temporary authority on receipt of an application submitted by wire or telephone for a station on board a ship provided that the application is accompanied by a statement by the applicant that he will, at the earliest practicable time thereafter, follow the application so submitted by filing with the Commission a formal or informal written application in accordance with §§ 8.26 or 8.36.

(1) The following specific types of factual situations are normally acceptable as constituting an emergency under this section:

(i) The ship involved is in a port of the continental United States and is unexpectedly required to sail therefrom within a period following the filing of application which does not exceed the applicable period of time set forth in subdivision (v) of this subparagraph.

(ii) The ship involved is arriving at a port of the continental United States on the date of application and is required to sail therefrom within a period after such date of arrival which does not exceed the applicable period of time set forth in subdivision (v) of this subparagraph.

(iii) The ship involved is arriving at a port in a United States territory or possession on the date of application and is required to sail therefrom within a period after such date of arrival which does not exceed the applicable period of time set forth in subdivision (v) of this subparagraph.

(iv) The ship involved is in a port of the continental United States or a port in a United States territory or possession and within a period of time which does not exceed the applicable period set forth in subdivision (v) of this subparagraph of expected departure therefrom, a deficiency in the radio installation is discovered which makes it necessary to secure authority to use and operate modified or replacement radio transmitting apparatus in order to place the station on board in good working condition before departure.

(v) The periods of time referred to in subdivisions (i) through (iv) of this subparagraph are as listed below. Saturdays, Sundays, and United States legal holidays are not to be included in calculating the period of time involved:

	Calendar days
Atlantic or Gulf coast	10
Pacific coast, Puerto Rico, Virgin Islands	15
Hawaii or Alaska	20
Territories or possessions in Pacific area west of Hawaii	30

(2) Each application made in an emergency in accordance with this subparagraph shall, prior to action thereon by the Commission, provide, as a minimum requirement, the following information:

(i) Name and address of applicant;

(ii) Name and address of applicant's agent, if application is made by an agent;

(iii) Official call letters, if any, already assigned a station on board the vessel involved.

(iv) Name and, if available, official registry number of ship;

(v) Factual statements to the extent necessary for the Commission to determine whether or not the granting of the desired authorization will be in accordance with the satisfied eligibility requirements of section 310 of the Communications Act.[3]

(vi) Relation of applicant to owner of vessel;

(vii) Statement of facts considered to constitute an emergency necessitating action under this sub-section.

(viii) Purpose and nature of proposed operation;

(ix) The date(s) and time(s) of the proposed operation;

(x) Frequency or frequencies, maximum plate input power, and class or classes of emission to be employed, and station(s) with which communication is intended;

(3) In supplying the information designated in subdivisions (vii) or (x), of this subparagraph, reference need be made only to the applicable example in paragraph (1) of this section, or to the applicable rule(s) or regulations(s) of the Commission in lieu of detailed information when this alternative is appropriate for meeting this requirement.

§ 8.43 *Application precedent to hearing.* Whenever the Commission regards an application for renewal of license as essential to the proper conduct of a hearing or investigation and specifically directs that the licensee file such application by a certain date, the application shall be filed within the time thus specified. If the licensee fails to file such application within the prescribed time, the hearing or investigation shall proceed as if such renewal application had been received.

§ 8.44 *Failure to prosecute applications.* An applicant not desiring to prosecute his application may request that it be dismissed without prejudice. Where an applicant fails to respond within a reasonable time to official correspondence or request for additional material, the application will be dismissed without prejudice.

§ 8.45 *Inconsistent or conflicting applications.* When an applicant has an application pending or undecided, no other inconsistent or conflicting application filed by the same applicant, his successor or assignee, or on behalf of or for the benefit of said applicant, will be considered by the Commission.

NOTE: The following sections of this subpart relate only to ship radio installations required by law for safety purposes.

§ 8.46 *Application for inspection.* Pursuant to subsection 360 (b) of the Communications Act, a ship of the United States which, by reason of the provisions of Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, is required to be fitted with a radio installation for safety purposes, shall, at least once in each 12-month period, be made available by the owner or operating agency of the ship for a detailed inspection of the ship's radio installation. A formal application, FCC Form 801, "Application for Ship Radio Inspection", for such inspection shall be filed with the Commission's Engineer in Charge at the radio district office nearest the desired port of inspection at least 3 days prior to the date on which such inspection is desired. A service representative (who holds the proper class of radio operator license) of the ship station licensee and (unless otherwise notified by the Commission's representative) sufficient personnel to lower and raise the antenna(s) and to launch any required radio-equipped lifeboat(s), shall be available at the ship at the time inspection is to be conducted. The application for such inspection shall be filed by the shipowner, the ship operating agency, the ship station licensee, or the shipmaster; preferably at a time to provide for such inspection coincident with the annual inspection of the vessel by the United States Coast Guard.

§ 8.47 *Application for certificate of compliance with Safety Convention.* Whenever a Safety Certificate or a Safety Radiotelegraphy Certificate or a modification or renewal thereof, is required by reason of the applicability to a ship of the radio provisions of the Safety Convention, an application, FCC Form 801, "Application for Ship Radio Inspection", for a required inspection of the radio installation on board and certification of the result of such inspection to the United States Coast Guard for the issuance of a Convention Certificate, shall be filed with the Commission's Engineer in Charge at the radio district office nearest the desired port of inspection at least 3 days prior to the date on which such inspection is desired. A service representative (who holds the proper class of radio operator license) of the ship station licensee and (unless otherwise notified by the Commission's representative) sufficient personnel to lower and raise the antenna(s) and to launch any required radio-equipped lifeboat(s), shall be available at the ship at the time inspection is to be conducted. Such application shall be filed by the shipowner, the ship operating agency, the ship station licensee, or the shipmaster; and when appropriate may be combined with the application for annual inspection prescribed by § 8.46.

§ 8.48 *Extra compensation for overtime services by inspectors.* Pursuant to section 4 (f) (2) of the Communications Act, inspectors in charge and radio inspectors of the Feld Service of the Engineering Department of the Commission, who may be required to remain on duty to perform services in connection with the inspection of ship radio equipment and apparatus for the purposes of Title III of Part II of the Act at night or on Sundays and holidays, shall receive extra compensation, to be paid by the master, owner, or agent of the vessel, under the following regulations:

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[3] See § 8.23.

(a) The rates of extra compensation are payable in cases where the services of such inspectors have been duly requested and they have reported for duty, even though no actual service may be performed.

(b) The extra compensation for overtime services is in addition to the regular compensation paid by the Government in the case of inspectors whose compensation is fixed on the ordinary per diem basis and those receiving compensation per month or per annum.

(c) Extra compensation for "waiting time" will not be allowed unless and until the inspector, actually reports for duty.

(d) For the purpose of computing extra compensation, the word "night" shall mean the time between the established closing hour of one day at the office involved and the established opening hour of the following business day at such office, but shall not include any such time within the 24 hours of a Sunday or holiday. Each Sunday and each holiday shall comprise the 24 hours between midnight and midnight. For the purposes of this section the time between the established closing hour of an office and midnight of the day immediately preceding a Sunday or holiday and the time from midnight until the established opening hour of the day immediately following the said Sunday or holiday will be considered as a single night. The term "holiday" shall include only national holidays, viz. January 1, February 22, May 30, July 4, the first Monday in September, November 11, Thanksgiving Day (when designated by the President), December 25, and such other days as may be designated national holidays by the President or by Congress.

(e) For authorized service in excess of 8 hours on any day excluding Sunday and holidays, extra compensation equivalent to one-half days' pay is payable for each 2 hours or fraction thereof of at least 1 hour that the overtime extends beyond the said 8 hours: *Provided*, That the overtime is not less than 1 hour. The maximum amount which may be paid for such authorized overtime services on any one day other than on a Sunday or holiday shall not exceed 2½ days' pay.

(f) In computing the amount earned for overtime at the rate of "one-half day's pay for each 2 hours or fraction thereof of at least 1 hour that the overtime extends beyond 5 p. m.", one-half day's pay shall be one-half of the gross daily rate of pay; each 2 hours is the time period for the purpose of computation; at least 1 hour means the minimum service in any such 2 hour overtime period for which extra pay may be granted, and each additional period in the amount of 2 hours or fraction thereof of at least 1 hour will entitle the Inspector to an additional one-half day's pay. Payment of extra compensation for services consisting of at least 1 hour is authorized from 5 p. m., even though such services may not actually begin until later: *Provided*, That the Inspector rendering the service remained on duty from 5 p. m., in which case the time between 5 p. m. and the time of beginning the actual service shall be computed as waiting time. Where the performance of actual services is preceded by such a waiting time there should be an affirmative statement that the Inspector was required to remain on duty between 5 p. m. and the time of beginning the actual services.

(g) In computing extra compensation where the services rendered are in broken periods, the time served should be combined with the waiting time and computed as continuous service.

(h) The same considerations shall apply when charging for waiting time as govern the charge for services actually rendered. No charge should be made unless after having reported for duty the waiting time amounts to at least 1 hour.

(i) For any authorized services performed on Sundays and holidays, totaling not more than 8 hours, extra compensation is payable equivalent to two days' pay in addition to any regular compensation for such days. For any authorized service in excess of 8 hours (starting either before or after 5 p. m. local time) extra compensation at the rate of one-half day's pay, based on the normal daily rate of pay, for each two hours of service or fraction thereof of not less than 1 hour, is payable in addition to the extra compensation payable for service up to and including 8 hours of service. The maximum extra compensation payable for work on Sundays and holidays is 4½ days' pay.

(j) When inspectors are in travel status overtime shall apply the same as at official station. However, compensation for such overtime shall not include travel time.

(k) Assessments and collection of fees against steamship companies for overtime services shall be made even though the payment to employees for such services may not be made until funds are appropriated for that purpose.

(l) An application on a form prescribed by the Commission shall be filed with the office being requested to furnish overtime services before such assignment can be made.

(m) Overtime services shall be billed to the steamship companies as soon as possible after the services have been performed and on collection voucher provided for that purpose. Remittance shall be by postal money order or certified check payable to the "Collector of Customs, Treasury Department" and forwarded that officer at the port indicated on the voucher, who shall in turn deposit such remittance on a properly designated receipt account.

(n) Protests against the exaction of extra compensation shall be forwarded to the Commission at Washington, D. C., and a copy thereof sent to the office which furnished the overtime services.

§ 8.49 *Application for exemption.* (a) Application for exemption from the radio equipment and operator requirements of Part II of Title III of the Communications Act and/or the Safety Convention, or application for modification or renewal of exemption previously granted, may be made by submitting FCC Form 820, "Application for Exemption", to the Commission at Washington, D. C. In cases of emergency found by the Commission, the Commission may, at its discretion, consider an informal application which should include the full information normally furnished on FCC Form 820.

(b) Whenever exemption from the radio equipment and operator requirements of the Safety Convention is granted in behalf of a ship, the Commission certifies the necessary particulars to the United States Coast Guard in order that an Exemption Certificate in behalf of that ship may be duly issued.

SUBPART C—STATION AUTHORIZATIONS

§ 8.61 *Authority for distress communication.* No provision of the International Radio Regulations shall prevent a mobile station in distress from using any means available to it for drawing attention, signalling its position, and obtaining help.

§ 8.62 *Changes in equipment of licensed station.* A licensed transmitter on board ship may be modified without making application to the Commission and without specific authorization from the Commission provided: (a) the change does not result in operation inconsistent with the rules of the Commission nor with the terms of the outstanding authorization for the station involved; (b) the change does not result in any impairment of the ability of the station licensee or the owner, operating agency, or ship master, to comply with any duty or obligation imposed by statute or international treaty or agreement for purposes of safety; and (c) a description of the change is incorporated in the next application for renewal or modification of license.

§ 8.63 *Normal license period.* (a) The period of time during which a license is valid for a station on board ship in the maritime mobile or maritime radiolocation service (other than licenses for developmental stations) normally shall begin at 3:00 a. m., e. s. t., and normally shall be:

(1) For an initial license, from one to five years from the date on which it becomes effective, the term varying as may be necessary to permit the orderly scheduling of renewal applications;

(2) For a renewal license, four years from the date on which the renewed license becomes effective.

§ 8.64 *License period for developmental station.* A license for a developmental station on board ship shall be issued specifically upon a temporary basis for a specified period of time not to exceed one year from the date on which the license becomes effective.

§ 8.65 *Issuance of modified and renewed license simultaneously.* When an application is granted by the Commission which necessitates the issuance of a modified station license to become effective less than 60 days prior to the expiration date of the license sought to be modified, and when an application for renewal of said license is granted subsequent or prior thereto, but within 30 days of the date of expiration of the outstanding license, the modified license as well as the renewed license shall be issued as one document in accordance with the combined action of the Commission.

§ 8.66 *One license for plurality of stations.* (a) Unless otherwise determined by the Commission in exceptional circumstances, one station license may be granted to authorize the use and operation of a designated maximum number of stations in the maritime mobile service—normally in multiples of ten stations—on board two or more ships of the United States whenever telephony is the sole type of transmission authorized and the following license elements are the same for each station and the requirements specified in paragraph (b) of this section are fulfilled:

(1) The station licensee;

(2) The conditions which establish and maintain control of the station by the station licensee;

(3) The class of station and nature of service;

(4) The type(s) of transmitting equipment to be authorized;

(5) The authorized transmitter power of identical types of transmitting equipment to be authorized;

(6) The frequency assignment and the authorized transmitter power, and class or classes of emission authorized on each radio-channel.

(b) The issuance of one station license as provided in paragraph (a) of this section shall be contingent upon compliance by the applicant and station licensee with the following requirements:

(1) The licensee shall, at the time the application(s) for license is (are) filed and during the entire period in which the station license is valid, keep the Commission at Washington, D. C., and the Commission's Engineer in Charge of each radio district in which the stations are operated, currently informed in writing of the names, registration numbers, and respective classes of ships which are provided with stations authorized in accordance with the terms of the station license;

(2) The transmitting equipment is not installed on board ship for the purpose of complying with the provisions of any statute or international agreement requiring the installation or use of such equipment for safety purposes;

(3) The transmitting equipment shall not be authorized in any other instrument of authorization issued by the Commission;

(4) No ship carrying a ship station licensed pursuant to this section shall, except in an emergency, proceed to any harbor or port of a foreign country.

§ 8.67 *Transfer or assignment of station authorization (see also § 8.37).* Section 310 (b) of the Communications Act expressly provides that a station license granted by the Commission, the frequencies authorized to be used by the licensee, and the rights therein granted shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, or indirectly by transfer of control of any corporation holding such license, to any person, unless the Commission shall, after securing full information, decide that said transfer is in the public interest, and shall give its consent in writing.

§ 8.68 *Authority for lifeboat radio station.* Whenever, in an application for ship station license, additional radio transmitting equipment described therein is designated as intended for use solely in a lifeboat or other survival craft associated with the principal vessel to which the application applies, operation of such lifeboat radio equipment, for maintenance tests and safety communication only, will be specifically authorized by the ship station license issued in response to that application.

§ 8.69 *Authority for transmission from cable buoy.* Provided the transmitting equipment to be used on a cable marker buoy is adequately described and the necessary technical data is supplied in an application for station license for a ship station on board a cable-repair ship with which the buoy is associated, the use of such transmitting equipment for radiolocation in accordance with § 8.407 will be specifically authorized by the related ship station license.

§ 8.70 *Authority to communicate with amateur stations.* (a) A ship station shall not communicate with or transmit to any amateur station unless it is specifically authorized by the Commission to do so. When authorized to communicate with duly licensed amateur stations, a ship station shall conduct all operation for this purpose in conformity with the relevant terms of its station license, and, except as otherwise permitted by the station license, shall, for this purpose,

(1) Transmit by means of A-1 or A-2 emission only on a frequency between 2,000 kc and 25,000 kc authorized for such emission;

(2) Not cause harmful interference to stations in the maritime mobile service nor to stations in the radiolocation service;

(3) Not engage in any communications relating directly or indirectly to a commercial transaction.

(b) Communication with amateur stations of foreign countries shall be limited to communications with such amateur stations as are authorized to communicate with the ship station concerned; in addition, the nature of the communications exchanged with foreign amateur stations shall, in addition to the requirements of paragraph (a) of this section, be in accordance with the International Radio Regulations and in conformity with the regulations of the foreign administration(s) having jurisdiction over the amateur station(s) involved.

§ 8.71 *Limitations concerning stations of portable nature other than marine utility stations.* Advance notice in writing or by telegram shall be given to the Commission and to the Engineer in Charge of the radio district where the operation is to take place by the licensee of a station of a portable nature (other than a marine-utility station) authorized for use on board ship prior to any operation contemplated on board a particular ship. Such notice shall state the call sign of such station, name of licensee, approximate date(s) of intended operation on board the designated ship, and the geographic area in which the ship is to be navigated. A station of a portable nature (other than a marine-utility station) authorized to be operated on board a ship or ships, shall not be retained on board any one ship during any continuous period exceeding three months without giving further notice to the Commission and to the Engineer in Charge of the radio district where the operation is to take place; *Provided*, That the foregoing requirements shall not apply to operation of a station of a portable nature on board small boats (tenders, dories, lifeboats, etc.), which are regularly associated with a parent ship, when such station is specifically identified in the license of such parent ship.

§ 8.72 *Authority for ship radar station.* Any license issued for a ship radar station shall be subject to the condition that the station licensee, in relation to the proper operation of the station in accordance with the radio law and rules and regulations of the Commission, will be represented on board the radar equipped vessel by the person who at any given time occupies the position of master.

§ 8.73 *Discontinuance of station operation.* In case of permanent discontinuance of operation by the particular licensee of a station on board ship licensed under this part, the licensee shall forward the station license to the Washington, D. C., office of the Commission with a request for its cancellation. A copy of the request for cancellation of the license shall be forwarded to the Commission's Engineer in Charge of the district in which the station is located.

§ 8.74 *Assignment of call signs.* (a) Ship stations in the maritime mobile service other than those designated in paragraphs (b), (c), (d) and (e) of this section shall be assigned call signs consisting of four-letter combinations commencing with the letter "K" or the letter "W".

EXAMPLES: KBCD or WBDC.

(b) Ship stations authorized to use telephony (except those specified in paragraph (c) of this section), but not authorized to use telegraphy except secondarily for purposes incidental to the use of telephony, located on board ships whose survival craft being carried, if any, are not authorized to operate radio transmitting equipment, shall be assigned call signs consisting of two-letter, four-digit combinations (the digits 0 and 1 may not immediately follow a letter) beginning with WA2000 and progressing numerically through WA9999 and beginning again with WB2000 and progressing thus through the "W" series of prefixes. In cases of vessels having or eligible for signal letters assignable by the United States Treasury Department, the Commission may, if it deems such action necessary or desirable, make exceptions to the foregoing provisions and assign call signs of such character as is legally permissible and as it may deem appropriate in each particular case.

(c) Normally, an individual call sign shall be assigned to each ship (other than survival craft attached to a parent ship) carrying a station licensed in the maritime mobile service: *Provided*, That a single call sign shall be assigned to a plurality of stations authorized by one station license in accordance with § 8.66 whenever such stations are easily identified by means other than call signs and their signal of identification or characteristics of emission are published, when required by international agreement, in appropriate international documents.

(d) Stations of lifeboats, lifecrafts, and other survival craft carried aboard ships shall be assigned call signs consisting of the call sign that has been assigned, or that would be assigned, to the ship station located on board that particular parent ship, followed by two digits (the digits 0 and 1 may not immediately follow a letter).

EXAMPLE: If the call sign that has been assigned, or would be assigned, to a ship station on board a parent ship is KBCD, the survival craft station shall be KBCD followed by two digits, such as KBCD45.

(e) Ship radar stations shall be assigned call signs for administrative purposes only. Such stations located on board ships having a ship station licensed in the maritime mobile service shall be assigned the same call sign as that ship station. If in a particular case the ship has no ship station licensed in the maritime mobile service, the ship radar station shall be assigned a call sign consisting of a two-letter, four-digit combination (the digits 0 and 1 may not immediately follow a letter) beginning with the letter "W".

EXAMPLES: If a ship station licensed in the maritime mobile service with call sign WA2000, or KBCD, or WBCD, the ship radar station call sign shall be respectively, WA2000, or KBCD, or WBCD. If the ship has no station licensed in the maritime mobile service, the ship radar station call sign shall be of the type WA2000). In case of a ship having, or eligible for, signal letters assignable by the United States Treasury Department, the Commission may, if it deems such action necessary or desirable, make exceptions to the foregoing provisions and assign a call sign of such character as is legally permissible and as it may deem appropriate in each particular case.

§ 8.75 *Operation during emergency.* (a) The licensee of any ship station or developmental station in the maritime mobile service on board ship, may, during a period of emergency in which the normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in communicating in a manner other than that specified in the instrument of authorization or in the rules and regulations governing the maritime mobile service: *Provided* (1) That as soon as possible after the beginning of such emergency use, notice shall be sent to the Commission at Washington 25, D. C., and to the Commission's Engineer in Charge of the district in which the station is located, stating the nature of the emergency and the emergency use being made of the station; (2) that such emergency use of the station shall be discontinued as soon as substantially normal communication facilities are again available; and (3) the Commission and the Engineer in Charge be notified immediately when such special use of the station is terminated: *And provided further*, That in no event shall any ship station or developmental station on board ship engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided for by the Commission, or by law: *And provided further*, That the Commission may, at any time, order the discontinuance of any such emergency communication undertaken under this section.

(b) The Commission may authorize the licensee of any radio station governed by this part during a period of national emergency to operate its facilities upon such frequencies, with such power and points of communication, and in such a manner beyond that specified in the station license as may be requested by the Army, Navy, or Air Force.

SUBPART D—GENERAL STATION REQUIREMENTS

§ 8.101 *Inspection of station.* (a) Pursuant to section 303 (n) of the Communications Act, the radio installation on board any ship of United States registry shall be available for inspection by duly authorized representatives of the Commission at any reasonable time and at such frequent intervals as within the discretion of the Commission will insure compliance with applicable regulations, laws, and treaties.

(b) The governments or appropriate administrations of countries, where a ship equipped with a radio station calls, may require the production of the station license for examination. The operator of the station, or the person responsible for the station, must facilitate this examination. The station license must be available so that it can be produced without delay. When the license cannot be produced or when manifest irregularities are observed, governments or administrations may inspect the radio installation in order to satisfy themselves that the installation conforms to the conditions imposed by the International Radio Regulations.

§ 8.102 *Posting of station license.* (a) Except for certain stations to which paragraph (b) of this section is applicable and except for stations authorized in accordance with § 8.66, the original license for each station on board ship subject to this part shall be posted in a conspicuous place at the principal location on board at which the station is operated; *Provided*, That the ship radar station license shall be posted in a conspicuous place at the principal radar operating position.

(b) With respect to stations not authorized in accordance with § 8.66, which are operated on board small boats where posting of the station license is impracticable, the requirement of paragraph (a) of this section shall not apply: *Provided*, That in lieu thereof the original station license or a photocopy thereof is retained on board such boat (other than survival craft carried on board a parent ship) during the entire time the station is located thereon.

(c) With respect to a plurality of stations authorized by one station license in accordance with the provisions of § 8.66, the station license shall be retained by the licensee at any location where it is accessible to governmental inspection. In lieu of posting the license on board ship, a Transmitter Identification Card (FCC Form No. 452-c Revised) properly executed shall be affixed to the authorized transmitting equipment on board each ship: *Provided*, That where the transmitting equipment is not visible from the operating position on the ship or is not readily accessible for governmental inspection, the Transmitter Identification Card shall be affixed to the control apparatus at the principal station operating position on board. The following information shall be entered on the Transmitter Identification Card by the station licensee:

(1) Name of station licensee;

(2) Station call sign assigned by the Commission;

(3) Exact location or locations of the actual station license and any station records required by the Commission;

(4) The assigned frequency or frequencies on which the transmitting equipment is authorized to be operated; and

(5) Signature of the licensee, or his duly authorized agent.

§ 8.103 *Location of station.* All components of a station on board ship subject to this part, including the antenna(s), antenna supporting structures, and source(s) of power used to energize the station equipment, shall be located on board the vessel identified in the station license, even though the vessel be temporarily moored. For purposes of communication, no component of a ship station shall be connected by wire line directly or indirectly to any equipment, apparatus, or facilities which are not located entirely on board the vessel identified in the station license: *Provided*, That the limitations of this section shall not apply when the station is being operated in an emergency under the provisions of § 8.75.

§ 8.104 *Operating controls.* (a) Effective on and after January 1, 1953, such operating controls as necessarily are used for commencing and discontinuing normal operation of each ship station, such operating controls as necessarily are used for normally changing from each operating radio-channel to any other associated operating radio-channel in the same characteristic portion of the spectrum, and such operating controls as necessarily are used for normally changing from transmission to reception and vice-versa, shall be available at the principal operating location of the station and shall be readily accessible to the authorized operator. This requirement, however, need not be met by equipment intended for use only in emergencies and not used for normal communications.

(b) Effective on and after January 1, 1952, every ship station using telegraphy shall, when an authorized operator is present at the principal operating location, be capable of change-over from telegraph transmission to telegraph reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time

(c) Effective on and after January 1, 1956, every ship station using telephony shall, when an authorized operator is present at the principal operating location, be capable of change-over from telephone transmission to telephone reception and vice-versa within a total period of two seconds under circumstances which do not require a change in operating radio-channel at the same time: *Provided*, That ship stations and marine-utility stations using telephony on any frequency assignment above 30 Mc shall, with respect to operation on such frequencies, comply with this requirement, effective on and after January 1, 1952.

(d) Effective on and after January 1, 1952, every ship station shall, during its hours of service and when the authorized operator is present at the principal operating location, be capable of—

(1) commencing operation within one minute after the need to do so occurs;

(2) discontinuing all emission within five seconds after emission is no longer required or after the necessity arises for emission to cease.

(e) Effective on and after January 1, 1956, every ship station using a multichannel installation for telegraphy shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from each operating radio-channel for telegraphy to any other operating radio-channel for telegraphy within:

(1) A period of five seconds if the particular radio-channels are within the same characteristic portion of the spectrum; or

(2) A period of fifteen seconds if the particular radio-channels are not within the same characteristic portion of the spectrum;

(3) *Provided, however*, That this requirement need not be met by equipment intended for use only in emergencies and not used for normal communication.

(f) Effective on and after the dates hereinafter designated in this subsection, every ship station and marine-utility station using a multi-channel installation for telephony shall, when the authorized operator is present at the principal operating location, be capable of changing, after the need to do so occurs, from one operating radio-channel for telephony to another operating radio-channel for telephony within:

(1) A period of five seconds, when changing from the calling channel to a working channel and vice-versa within the frequency band 1600 kc to 4000 kc; effective on and after January 1, 1958; or

(2) A period of three seconds, when changing from the calling channel to a working channel and vice-versa within the frequency band 156 Mc to 162 Mc; effective on and after January 1, 1952.

(g) Whenever the same radio-channel is used for radiotelephone transmission and reception, means shall be provided so that transmission of the carrier wave may be either automatically "voice-controlled" or controlled manually by the person whose speech is being transmitted.

(h) Effective on and after January 1, 1952, each ship station using telegraphy on frequencies within the band 365 kc to 515 kc (except stations which are not capable of providing a plate input power in excess of 150 watts) must be provided with a device or arrangement readily permitting the use of a plate input power for telegraphy which is not in excess of 100 watts.

§ 8.105 *Required radio-channels for telegraphy.* (a) Each ship station using telegraphy on frequencies within the band 365 kc to 515 kc (except stations on lifeboats or survival craft) shall be capable of transmitting and receiving classes A1 and A2 emission on the radio-channel of which 500 kc is the assigned frequency, and on at least one additional radio-channel within this band which is authorized for working. When a radiotelegraph installation is compulsorily fitted for safety purposes, a third radio-channel which is authorized for direction-finding within this band must be provided also.

(b) Each ship station using telegraphy on frequencies within the band 100 kc to 160 kc shall be capable of transmitting and receiving class A1 emission on the radio-channel of which 143 kc is the assigned frequency, and on at least two additional radio-channels within this band which are authorized for working.

§ 8.106 *Required radio-channels for telephony.* (a) Each ship station using telephony on frequencies within the band 1600 kc to 4000 kc shall be capable of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) on the radio-channel of which 2182 kc is the authorized carrier frequency; provided that with respect to such operation outside the Great Lakes area, this requirement shall be effective on and after January 1, 1954; further provided, that with respect to ship stations on board vessels navigated solely within 300 nautical miles of Charleston, South Carolina, Jacksonville, Florida, or Wilmington, California, or within 600 nautical miles of Vancouver, British Columbia, this requirement shall become effective only when specifically ordered by the Commission.

(b) Each ship station using telephony on frequencies within the band 1600 kc to 4000 kc which is licensed to transmit on the radio-channel of which 2182 kc is the authorized carrier frequency, shall be capable also of receiving telephony on this channel, and shall be capable also of transmitting and receiving (and shall be licensed to transmit) class A3 emission (modulation by voice frequencies) on at least one other radio-channel authorized for working in this band.

(c) Effective on and after January 1, 1952, each ship station, and each marine-utility station used on board ship, which is licensed to transmit by telephony on any radio-channel within the frequency band 156.25 Mc to 157.45 Mc, shall be capable of transmitting and receiving (and shall be licensed to transmit) class F3 emission on the radio-channels of which the authorized carrier frequencies are 156.3 Mc and 156.8 Mc and additionally on at least one radio-channel in this frequency band which is authorized for communication with a coast station or stations; provided, that ship stations licensed prior to January 1, 1951, to use single-channel equipment on frequencies within this band on an experimental or developmental basis, need not comply with this requirement under normal class of ship station license until on and after January 1, 1953. The requirements of this paragraph, however, shall not apply to marine-utility stations or stations of a portable nature which are not capable of a plate input power in excess of three watts and are not capable of being readily adjusted for operation on more than one radio-channel.

§ 8.107 *Antenna requirements.* (a) The antenna(s) of each public ship station and of each ship station compulsorily provided on board a vessel for safety purposes pursuant to statute or international agreement shall, in so far as is practicable in each case, have electrical characteristics that will, in conjunction with the particular transmitting apparatus employed, assure maximum attainable efficiency in the conversion of antenna power to radiated power.

(b) All emission of a ship station, or a marine-utility station on board ship, using telephony on any frequency assignment within the frequency band 30 Mc to 200 Mc normally shall be polarized vertically at the source when the vessel carrying the station is in a normal vertical plane: *Provided*, The Commission may authorize the use of any other form of polarization in addition to or in lieu of vertical polarization if the applicant or station licensee makes a satisfactory showing that such authorization is necessary for effective communication or reduction of interference and would be beneficial to reception of the emission by other stations in the maritime mobile service.

§ 8.108 *Adjustment of equipment.* The transmitting equipment of each station on board ship subject to this part shall be operated, tuned, and adjusted so that there will be no radiation of emissions outside the authorized frequency band that interferes with the service of any other station. Any spurious emissions, including radio frequency harmonics and audio frequency harmonics, shall be maintained at the lowest practicable level.

§ 8.109 *Measurement of emission frequencies.* (a) The licensee of each station on board ship subject to this part shall be responsible[2] for measurement of each carrier frequency in use by the station as stipulated in the following subsections of this section: *Provided*, That when a carrier does not exist (except for ship radar stations)[3] measurement shall be made of the frequency coinciding with the center frequency of the emission bandwidth, in lieu of measurement of the carrier frequency.

(b) Measurement of the carrier frequency shall occur during normal operating conditions, including with and without the application of amplitude modulation if such modulation is employed. In the case of a station using frequency modulation, measurement of the carrier frequency shall be made while modulation is not applied.

(c) Measurement of the carrier frequency shall be made by means independent of the carrier frequency determining elements of the transmitting apparatus, and the measuring equipment, shall be capable of revealing deviation in cycles per second from the authorized carrier frequency or the assigned frequency of the station with an accuracy of one-half the frequency tolerance authorized by the Commission.

(d) Measurement of the carrier frequency shall, as a minimum requirement, be made at the following times:

(1) When the involved transmitting apparatus is placed in service both initially and on each occasion after it has been removed (other than marine-utility stations and stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the frequency of the carrier (including marine-utility stations and stations of portable nature).

(3) As soon as is practicable after the licensee receives an official notice from the Commission that the carrier frequency or the frequency coinciding with the center of the emission band-width has been observed by the Commission to be beyond the frequency tolerance.

(e) Each frequency measurement performed in order to comply with the provisions of this section shall be recorded in the official records of the station. In each instance of measurement the record shall show the location of the transmitter, the location of the measuring equipment, the identity of the transmitter involved, the time and date of measurement, the indicated deviation in cycles per second above or below the authorized carrier frequency or (when a carrier does not exist) above or below the assigned frequency (or other appropriate data in respect to measurement of the frequencies of emission of a ship radar station) and the signature of the person(s) who made the measurement, together with the name of any measurement service with whom such person(s) may be associated for this purpose. Each original record of measurement shall, wherever practicable, be continuously retained at the particular station until after the date of expiration or cancellation of the current station license, and shall be made available to the Commission upon request or during inspection of the station by an official representative of the Commission. When such retention of these records at the station is deemed by the licensee to be impracticable (such as may be the situation in respect to marine-utility stations and stations of portable nature) the original records shall be retained under jurisdiction of the station licensee at any location in the United States where they can be made readily available for inspection upon request by the Commission or an official representative thereof.

(f) Measurement of frequency required by the provisions of this section may, at the option of the station licensee, be made by any qualified engineering measurement service: *Provided*, That nothing contained in this paragraph shall be construed to change or diminish in any respect the responsibility of the station licensee for proper functioning and operation of the station in accordance with law.

§ 8.110 *Measurement of transmitter power*. (a) The actual power of each radio transmitter of a ship station or a marine-utility station shall be maintained within the following tolerance of the specific power authorized for that transmitter by the Commission:

(1) When the maximum operating power only is indicated, the actual power shall, in so far as is practicable, not be more than that necessary to carry on the service for which the station is licensed and in no event more than 5 percent above the maximum power authorized;

(2) When the exact authorized power is indicated, the actual power shall, at all times, be within the limits of 105 percent and 90 percent of the authorized power.

(b) For the purpose of assuring adherence to the requirement of paragraph (a) of this section, each radio transmitter rated by the manufacturer as being capable of a plate input power in excess of 200 watts or an antenna power in excess of 100 watts and initially placed in service after July 1, 1951, in a ship station, shall be fitted with the instrument(s) necessary to indicate the actual plate input power to the transmitter whenever the latter is in use: *Provided*, That on and after January 1, 1956, this requirement shall apply to all transmitters of ship stations (including stations of portable nature) rated by the manufacturer with respect to power as set forth in this subsection.

(c) When the power of a transmitter in a ship station, as rated by the manufacturer, is capable of being more than 105 percent of the authorized power, the station licensee, effective on and after July 1, 1951, shall employ an approved procedure to determine that the actual power does not exceed the authorized power. This determination shall be made and the result thereof entered in the licensee's records (which shall be made available to the Commission or an official representative thereof, upon request) as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (other than marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation;

(2) As soon as practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the actual power (including marine-utility stations and stations of portable nature);

(3) When required by an official representative of the Commission on the basis that the actual power appears, from an official inspection of the station, to exceed the authorized power.

§ 8.111 *Modulation adjustments for telephony*. (a) Ship stations and marine-utility stations using class A3 emission for telephony shall be capable of proper technical operation with peak modulation percentage between 75 and 100 percent. In so far as is practicable, the AM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces peak modulation percentages within these limits.

(b) Ship stations and marine-utility stations using class F3 emission for telephony shall be capable of proper technical operation with peak modulation percentage as high as is practicable in reference to the frequency swing normally regarded as 100 per modulation. In general, the FM transmitting equipment of such stations shall be adjusted so that the transmission of speech normally produces, on this basis, peak modulation percentages between 75 and 100 percent.

(c) The adjustments required by paragraph (a) and (b) of this section shall be made and recorded in the licensee's records as follows:

(1) When the involved transmitting apparatus is placed in service, both initially and on each occasion after it has been removed (except for marine-utility stations and other stations of portable nature) physically and temporarily from its place of installation.

(2) As soon as is practicable after any change, replacement, or repair is made of any part of the equipment which determines or affects the percentage modulation (including marine-utility stations and other stations of portable nature).

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[2] Par. 6 (3), Art. 9, of the General Radio Regulations (Revision of Cairo, 1938) provides that all ship stations transmitting on frequencies in the band 100 to 160 kilocycles and on frequencies above 4,000 kilocycles (construed to mean frequencies within the band 4,000 to 25,000 kilocycles) must be equipped with a wavemeter (frequency meter) having a precision at least equal to 0.005 (0.5 percent) when the transmitter itself is capable of being adjusted with this precision or better. For this purpose, the Commission will accept a master-oscillator of a ship station electron tube transmitter in lieu of the frequency meter prescribed by this international regulation, provided the calibration of the said transmitter and of the circuit as a whole is such as to permit the convenient adjustment of the transmitter to its licensed frequencies within the tolerance for ship stations prescribed by § 8.131.

[3] The license of a ship radar station shall take the necessary measures to insure that the transmitter operates within the emission limits specified in § 8.133.

(3) When required by the Commission on the basis that the percentage modulation observed during an official inspection of the station by an official representative of the Commission appears to not comply with the requirement of paragraphs (a) or (b) of this section.

§ 8.112 *General requirements for receiving apparatus.* (a) The radio equipment of each ship station, or marine-utility station, using telegraphy or telephony, must be capable of permitting the reception of the class or classes of emission on the frequency or frequencies, normally received for the service carried on. The technical arrangement of the station apparatus shall be such that the necessary reception of emissions, including in particular that necessary for compliance with the provisions of §§ 8.181 and 8.240, can be readily effected prior to the transmission of any signals or communications by the ship station on the associated transmitting frequency.

§ 8.113 *Installation of power source.* The exact location and physical arrangement on board a vessel of any storage battery, or engine-driven generator and fuel tank, used as a source of power for any component of a licensed radio station subject to this part and located on board such vessel, and the method of ventilating the battery or engine compartment, shall be in accordance with applicable rules or regulations promulgated by the United States Coast Guard. If the Commission finds that such rules or regulations are not complied with by a particular station of this category, an application for license or modification or renewal of license thereafter filed in behalf of that station may be designated by the Commission for hearing to determine whether or not the granting of such application would meet the public interest, convenience or necessity.

§ 8.114 *Clock required.* (a) Each ship station licensed to operate on frequencies below 515 kilocycles shall be provided with a reliable clock with a second hand, preferably a sweep second hand. This clock shall be securely mounted in such a position that the second dial can be easily and accurately read by the operator from his normal operating position, from the operating position at which he would ordinarily transmit the international auto-alarm signal by hand, and from the operating position in the radio room used in testing the auto-alarm (if installed) for response to signals from the testing device. Stations which are compulsorily installed on board ship for safety purposes shall, in addition, meet such supplementary requirements for clocks as are prescribed in Subpart R of this part.

(b) Each ship station licensed for operation on frequencies above 1500 kilocycles only, shall, as may be necessary during operation, have available to the operator a suitable timepiece (preferably equipped with a second hand) of sufficient accuracy and reliability to allow for operation of the station in conformity with the terms of its license, regulations of the Commission, and the International Radio Regulations.

§ 8.115 *Retention of radio station logs.* (a) All station logs which are required under those provisions of this part pertaining to the particular classes of stations subject to this part shall be retained by the licensee for a period of one year from date of entry and for such additional periods as required by the following subparagraphs:

(1) Station logs involving communications incident to a distress or disaster shall be retained by the station licensee for a period of 3 years from date of entry;

(2) Station logs which include entries of communications incident to or involved in an investigation by the Commission and concerning which the station licensee has been notified shall be retained by the station licensee until such licensee is specifically authorized in writing by the Commission to destroy them.

(3) Station logs incident to or involved in any claim or complaint of which the station licensee has notice shall be retained by such licensee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

(b) Station logs shall be made available to an authorized representative of the Commission (including any engineers of the Commission's Field Engineering and Monitoring Division) upon request.

(c) Ship station logs shall be fully completed at the end of each voyage and before the operator(s) (or other person(s) responsible under the applicable provisions of this part) leave the ship. The radio log currently in use shall be kept by the licensed operator(s) of the station or as otherwise authorized by the applicable provisions of this part, and during use shall be located in the principal radio operating room of the vessel. At the conclusion of each ocean voyage terminating at a port of the United States (includes Hawaii, Alaska, Puerto Rico, and Virgin Islands), the original radio log (or a duplicate thereof) [4] dating from the last departure of the vessel from a United States port shall be retained under proper custody on board the vessel for a sufficient period of time (not more than 24 hours) to be available for inspection by duly authorized representatives of the Commission. In the case of vessels which, during any period of thirty consecutive days or more, are not navigated on an ocean voyage, the original radio log (or a duplicate thereof) [4] dating from the beginning of such thirty day period shall be retained under proper custody on board the vessel until the end of that period and, at any reasonable time therein, shall be available for inspection by duly authorized representatives of the Commission. After retention on board the vessel as herein stipulated, the original log (and the duplicate log if provided) [4] may be filed at an established shore office of the station licensee, and shall be retained as stipulated by paragraph (a) of this section.

SUBPART E—STANDARD TECHNICAL REQUIREMENTS

§ 8.131 *Authorized frequency tolerance.* (a) Unless the particular instrument of authorization specifically provides otherwise, the frequency tolerances [1] authorized for stations on board ships subject to this part shall be as prescribed in the following paragraphs.

(b) Authorized frequency tolerances for ship stations operating on frequencies below 515 kc or within the frequency-band 4,000 kc to 25,000 kc:

Frequency ranges	Applicable until Jan. 1, 1953, to transmitters installed before Jan. 1, 1950	Applicable to transmitters installed after Jan. 1, 1950, and to all transmitters after Jan. 1, 1953
(1) From 100 to 515 kc (except for 500 kc transmitters intended for use solely lifeboats or other survival craft)	*Percent* 0.3	*Percent* 0.1
(2) 500 kc transmitters intended for use solely in lifeboats or other survival craft	.5	.5
(3) Stations when using frequencies within the band 4000 kc to 30 Mc other than those specified in (4) below	.02	.01
(4) Stations (including lifeboat transmitters) when using frequencies within the following bands:		
From 4115 to 4165 kc inclusive	.05	.02
From 5500 to 5550 kc inclusive	.05	.02
From 6200 to 6250 kc inslusive	.05	.02
From 8230 to 8330 kc inclusive	.05	.02
From 11,000 to 11,100 kc inclusive	.05	.02
From 12,340 to 12,500 kc inclusive (except 12,440 and 12,460 kc)	.05	.02
12,440 and 12,460 kc	.02	.02
From 16,400 to 16,700 kc inclusive (except 16,530, 16,575, and 16,590 kc)	.05	.02
16,530 and 16,590 kc	.025	.02
16,575 kc	.02	.02
22,000 to 22,200 kc	.05	.02

(c) Authorized frequency tolerances for ship stations operating on frequencies within the band 1600 kc to 3500 kc:

	Applicable until Jan. 1, 1953, to transmitters installed before Jan. 1, 1950	Applicable after Jan. 1, 1953 to all transmitters except those installed after July 1, 1951	Applicable to all transmitters installed after July 1, 1951
(1) From 1600 to 3500 kc inclusive (except for lifeboat transmitters under the condition specified below)	*Percent* 0.04	*Percent* 0.02	*Percent* 0.01
(2) For transmitters intended for use solely in lifeboats or other survival craft to be used on the international telephone distress frequency or the Region 2 ship telegraph calling frequency in this range	.05	.05	.05

(d) Authorized frequency tolerances for ship stations operating on frequencies above 30 Mc and for marine-utility stations:

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[4] Duplicate logs are not required by the provisions of this subsection, unless the original log is removed prior to opportunity for official inspection.

[1] Frequency tolerance is defined by paragraph (k) of § 8.7.

	Percent
(1) From 30 to 100 Mc:	
For stations licensed to operate with a place input power not in excess of 3 watts	0.02
For all other stations	.01
(2) From 100 to 200 Mc:	
For stations on survival craft intended for use in emergencies only	.01
For stations licensed to operate with a plate input power not in excess of 3 watts	.01
For all other stations	.005

(e) For stations in the maritime radio-location service (other than ship radar stations) the authorized frequency tolerance shall be specified in the instrument of authorization issued in behalf of each station.

(f) The frequency tolerance authorized for ship radar stations is prescribed as follows: The frequency at which maximum emission occurs shall be within the authorized frequency-band and shall not be closer than 1.5/T megacycles per second to the upper and lower limits of the authorized frequency-band, where "T" is the pulse duration in microseconds.

§ 8.132 *Authorized classes of emission.* (a) When the class of emission is specifically designated in the instrument of authorization, stations on board ship subject to this part shall use emission in conformity with the terms of that document. Otherwise, such stations are authorized to employ classes of emission as follows:

(1) Frequency-band: Classes of emission authorized; ship stations using telegraphy.

100 to 160 kc	A1, and for brief testing AO.
160 to 515 kc	A1, A2,[1] A2a,[1] A2b,[1] and for brief testing AO.
2,200 kc to 25,000 kc	A1, A2,[1] A2a,[1] A2b,[1] and for brief testing AO.

(2) Frequency-band: Classes of emission authorized; ship stations using telephony.

1600 kc to 30 Mc	A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing AO.
30 Mc to 50 Mc	A3, A3a, A3b, F3; and for brief operating signals A1, A2, A2a, A2b, F1, F2; also for brief testing AO, FO.
152 Mc to 162 Mc	In Regions 1, 2, and 3, F3; and for brief operating signals F1 and F2; also for brief testing FO; additionally in Regions 1 and 3 only, A3, A3a, A3b; and for brief operating signals A1, A2, A2a, A2b; also for brief testing AO.
For other frequencies or frequency-bands.	As designated in the station authorization.

(3) Frequency-band: Classes of emission authorized; ship radar stations.

Above 3000 Mc	PO.

[1] Permissible by keying the modulated emission. Keying the modulating audio frequency only, without interruption of the carrier wave, is not permissible. The use of any audio frequency pulse device such as a so-called "chopper" is prohibited. The use of these classes of emission on frequencies between 4,000 kc and 23,000 kc, except for stations of survival craft and for special purposes, will be prohibited when Article 33 of the International Radio Regulations of Atlantic City, 1947, becomes effective.

(4) Stations of any category not designated in subparagraphs (1), (2), and (3) of this paragraph shall use the class or classes of emission specified in the particular station authorization.

(b) Classes of emission not authorized in paragraph (a) of this section may be authorized by the Commission in special circumstances, subsequent to a satisfactory showing by the applicant of a need therefor and provided harmful interference will not result from the use thereof. Each application requesting such special authorization shall fully describe the emission desired to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission is required.[2]

§ 8.133 *Authorized emission-bandwidths.*[3] (a) When the authorized emission-bandwidth is specifically designated in the instrument of authorization, a station on board ship subject to this part shall use emission-bandwidth(s) in conformity with the terms of that document. Otherwise, such stations shall use emission-bandwidths not exceeding those set forth in this section for the respective classes of emission authorized in § 8.132.

(b) The authorized emission-bandwidths hereinafter designated are established in relation to the operational factors set forth in the following subparagraphs:

(1) Class A0 emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally an amplitude-modulated wave;

(2) Class A1 emission means a carrier wave (without the use of modulating audio frequency) keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters;

(3) Class A2 emission means a carrier wave amplitude-modulated at audio frequency not exceeding 1250 cycles per second, the modulated carrier wave being keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters. (The authorized emission-bandwidths for classes A2, A2a, and A2b emission are designated hereinafter on this basis);

(4) Class A3 emission means a carrier wave amplitude-modulated at audio frequencies corresponding to those necessary for intelligible speech transmitted at conversational speed. (The authorized emission-bandwidths for classes A3, A3a, and A3b emission are designated hereinafter on this basis);

(5) Class FO emission means the incidental radiation of an unmodulated carrier wave from a station which is authorized to use normally a frequency-modulated wave;

(6) Class F1 emission means a continuous (without the use of modulating audio frequency), the frequency of which is alternately shifted between the normal value and another specific value, by keying normally for telegraphy, so as to transmit intelligence in the International Morse code. The authorized bandwidth for class F1 emission is designated hereinafter on the basis of the bandwidth authorized for class F2 emission;

(7) Class F2 emission means a continuous wave frequency-modulated at such audio frequency and with such deviation ratio as to not exceed the authorized emission-bandwidth, the modulating frequency being keyed normally for telegraphy so as to transmit intelligence in the International Morse code at a speed not exceeding 40 words per minute, with the average word composed of 5 letters.

(8) Class F3 emission means a continuous wave frequency-modulated at audio frequencies corresponding to those necessary for intelligible speech transmitted at conversational speed, with a deviation ratio of any value necessary for effective communication, provided the resulting emission shall not exceed the authorized emission-bandwidth.

(9) The keying of a carrier wave or the amplitude modulation of a carrier wave by means of audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective signalling code intended to actuate a selective-calling device, shall be construed as class A1 emission or class A2, A2a, or A2b emission, respectively, within the limits of the respective authorized emission-bandwidths hereinafter set forth; provided that for class A2, A2a, or A2b emission, the frequency of modulation does not exceed 1300 cycles per second on radio-channels authorized for telegraphy, nor 3000 cycles per second on radio-channels authorized for telephony.

(10) The frequency-shift keying of a carrier wave or the frequency-modulation of a carrier wave at audio or sub-audible frequency or frequencies, so as to transmit in each instance a selective signalling code intended to actuate a selective-calling device, shall be construed as class F1 emission or class F2 emission, respectively, within the limits of the respective authorized emission-bandwidths hereinafter set forth; provided the frequency deviation used, and in the case of class F2 emission the modulating frequency or frequencies used, is (are) such that the emission in fact does not exceed the respective authorized emission-bandwidth.

(11) Class PO emission means pulse transmission with the absence of any

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[2] For information regarding the classification of emissions and the calculation of the bandwidth, reference should be made to Part 2 of the Commission's rules.

[3] For definition of the term "emission-bandwidth", see paragraph (o) of § 8.7.

modulation intended to carry information, as used by ship radar stations licensed by the Commission.

(c) (1) The authorized emission-bandwidths for classes of emission authorized in § 8.132 shall be as follows:

Class of emission	Emission designator	Emission-band width authorized for transmission of intelligence [1]
AO	None	None.
A1	0.15, A1	150 cycles per second.
A2	2.7, A2	2,700 cycles per second.
A2a	1.35, A2a	1,350 cycles per second.
A2b	2.7, A2b	2,700 cycles per second.
A3	8, A3	8,000 cycles per second.
A3a	4, A3a	4,000 cycles per second.
A3b	8, A3b	8,000 cycles per second.
FO	None	None.
F1:		
For 35 Mc to 35.2 Mc	36, F3	36,000 cycles per sec.
For 156 Mc to 158 Mc	42, F3	42,000 cycles per sec.
F2:		
For 35 Mc to 35.2 Mc	36, F3	36,000 cycles per sec.
For 156 Mc to 158 Mc	42, F3	42,000 cycles per sec.
F3:		
For 35 Mc to 35.2 Mc	36, F3	36,000 cycles per sec.
For 156 Mc to 158 Mc	42, F3	42,000 cycles per sec.
PO	Variable, according to the authorized frequency band.	The frequency at which maximum emission occurs shall be within the authorized frequency band and shall not be closer than 1.5/T megacycles per second to the upper and lower limits of the authorized frequency band, where "T" is the pulse duration in microseconds.

[1] This bandwidth does not take into consideration the effect of modulation caused by any alternating component(s) of electron-tube grid, anode, or cathode electric power supplies, which modulation is not intended to convey intelligence.

(2) With reference to the "emission designator" expressed in paragraph (b) (10) of this section when the authorized class of emission is specifically designated in the station authorization and is prefixed by a numeral, that numeral specifies the authorized emission-bandwidth in kilocycles per second to be occupied by that class of emission in accordance with all other terms and conditions of the station authorization.

(3) In the actual operation of a ship station, unless otherwise provided by the station authorization,

(i) When a carrier is present, the frequency coinciding with the center of the frequency-band occupied by the emission-bandwidth shall, when class A2, A2b, A3, F2, or F3 emission is being used, be the same as the carrier frequency;

(ii) When a carrier is not present, the frequency-band occupied by the emission-bandwidth shall be within the authorized frequency-band.

(d) Bandwidths in excess of those set forth in paragraph (c) of this section or emission-bandwidths for other classes of emission may be authorized and set forth in the instrument of authorization if approved by the Commission subsequent to a satisfactory showing by the applicant of need therefor. Each application requesting such special authorization shall fully describe the emission desired to be used, shall indicate the emission-bandwidth required for effective operation, and shall state the purpose for which such emission-bandwidth is required.

§ 8.134 *Authorized transmitter power.* (a) Stations on board ship subject to this part may use such antenna power as is necessary to carry on the service for which the station is licensed, on condition that the maximum authorized transmitter power shall not be exceeded. Unless the station authorization specifically provides otherwise, the maximum authorized transmitter power (as defined in paragraph (ii) of § 8.7) shall not exceed the particular power set forth in the following paragraphs which is applicable under the controlling factors designated therein in direct relation to that power.

(b) For ship stations on board passenger vessels of 5,000 gross tons and over, which are navigated on ocean voyages, the maximum authorized transmitter power is set forth as follows:

Frequency-band in which transmission occurs and maximum authorized transmitter power (with or without modulation)

For telegraphy below 25,000 kc:	*Watts*
100 kc to 515 kc	8,000
4,000 kc to 25,000 kc	3,000

For telephony below 25,000 kc

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter power (when no modulation is present) frequency band in which transmission occurs	
	2,000 kc to 4,000 kc	4,000 kc to 25,000 kc
	Watts	*Watts*
Class C—plate or plate and screen-grid modulated	700	2800
Class C—control, screen, or suppressor-grid modulated	1400	5600
Class C—cathode modulated	1120	4480
Class B—linear	1400	5600
Class BC—high efficiency	840	3360
Other classes	As specified in the station authorization	

(c) For ship stations on board any category of vessel, other than the class of passenger ship prescribed in paragraph (b) of this section, the maximum authorized transmitter power is set forth as follows:

Frequency-band in which transmission occurs and maximum authorized transmitter power (with or without modulation)

For telegraphy below 25,000 kc:	*Watts*
100 kc to 515 kc	1,500
4,000 kc to 25,000 kc	700

For telephony below 25,000 kc

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter power (when no modulation is present) frequency band in which transmission occurs		
	2,000 kc to 4,000 kc (all areas)	4,000 kc to 25,000 kc	
		U. S. inland waters [1]	Other areas
	Watts	*Watts*	*Watts*
Class C—plate or plate and screen-grid modulated	150	150	750
Class C—control, screen, or suppressor-grid modulated	300	300	1500
Class C—cathode modulated	240	240	1200
Class B—linear	300	300	1500
Class BC—high efficiency	180	180	900
Other classes	As specified in the station authorization		

[1] Means the Great Lakes area and the Mississippi River and connecting inland waters.

(d) For ship stations and marine-utility stations using telephony on any frequency assignment within the frequency-band 35 Mc to 44 Mc and employing amplitude modulation (AM):

Class of radio-frequency amplifier used in last radio stage of transmitter	Maximum authorized transmitter power (when no modulation is present)	
	Ship stations	Marine-utility stations
	Watts	*Watts*
Class C—plate, or plate and screen-grid modulated	100	10
Class C—control, screen, or suppressor-grid modulated	200	20
Class C—cathode modulated	160	16
Class B—linear	200	20
Class BC—high efficiency	120	12
Other classes	As specified in the station authorization	

(e) For ship stations using telephony on any frequency assignment within the frequency-band 35 Mc to 44 Mc or 156.25 Mc to 157.45 Mc and employing frequency modulation (FM), the maximum authorized transmitter power (with or without modulation) is 100 watts. For marine-utility stations under the conditions prescribed in this paragraph for ship stations, the maximum authorized transmitter power is 10 watts.

(f) For ship stations and marine-utility stations using telephony in Region 1 or 3 by means of amplitude modulation (AM) on any frequency assignment within the frequency-band 156.25 Mc to 157.45 Mc, the maximum authorized transmitter power is the same as that designated in paragraph (d) of this section for operation within the band 35 Mc to 44 Mc.

(g) For stations on board ship which are authorized to transmit on frequencies above 157.45 Mc, the power authorized to be used shall be specified in the respective station authorization.

(h) (1) For the purpose of assuring adherence to the requirements of this section, the authorized transmitter power, with reference to paragraphs (ff) and (ii) of § 8.7, shall be computed for electron-tube transmitters by the method set forth in the following subsections.

(2) The authorized transmitter power shall be the sum of the product(s) obtained by multiplying the effective anode (plate) voltage, applied to each electron tube of the last radio stage supplying radio-frequency power to the antenna, by the effective anode (plate) current flowing through each such tube, or shall be the sum of the actual powers supplied to each such tube.

(3) Measurement of the effective anode (plate) voltage shall be accomplished by means of a direct-current type voltmeter (as applicable) or an alternating-current type voltmeter of proper frequency range (as applicable), each such instrument being of standard accuracy and reliability. Where the same voltage is applied to more than one electron tube, measurement of this voltage shall be regarded as measurement of the voltage applied to each individual electron tube of that particular group.

(4) Measurement of the effective anode (plate) current shall be accomplished by means of a direct-current (d'Arsonval galvanometer movement) type ammeter of standard accuracy and reliability. Where the anode (plate) current through more than one electron tube flows through a common point in the electrical circuit, measurement of the current at this point shall be regarded as measurement of the total effective anode (plate) current flowing through all electron tubes of that particular group.

(5) Measurement of the actual power in watts supplied to the anode (plate) circuit of one or more electron tubes shall be acceptable provided a wattmeter properly activated by the form of voltage and current supplied is employed, and is of standard accuracy and reliability.

(6) When any current, in addition to the actual anode (plate) current, flows through an ammeter or wattmeter being used for measurements in accordance with this subsection (such as screen-grid current), such current, unless separately measured, shall not be deducted from the current measured for the purpose of this subsection.

§ 8.135 *Suppression of receiver radiation.* (a) The use or operation of the following type of radio receiving equipment is prohibited on board any ship of the United States:

(1) Radio receiving equipment which, when used or operated either with or without connection to an actual antenna (including loop antennas) on shipboard, creates an electromagnetic field, at any radio frequency, of more than 0.1 microvolt per meter at a distance over seawater of more than one nautical mile from the receiver;

(2) Radio receiving equipment which, when in operation, is capable of delivering more than 400 micromicrowatts of power at any radio frequency to an artificial antenna having electrical characteristics designated[4] by the Commission as equivalent to those of the average receiving antenna(s) used on shipboard.

(3) Radio receiving equipment shall be deemed capable of meeting the requirement of subparagraph (1) of this paragraph if, when adjusted for radio reception at each frequency within its tuning range, it is not capable of delivering power of more than 400 micromicrowatts at any radio frequency to an artificial antenna having electrical characteristics designated[4] by the Commission as equivalent to those of the average receiving antenna(s) used on shipboard.

(b) The limitations imposed upon radio receiving equipment by paragraph (a) of this section shall not apply to such equipment when used or operated on board any ship of less than 1,600 gross tons or on board any ship navigated solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States, until on and after January 1, 1958.

§ 8.136 *Type approval of transmitters for licensing.* (a) Upon written request therefor made by the manufacturer or applicant for related station authorization, approval of a specific and readily identifiable type of radio transmitter as being capable of complying with all requirements of the Commission solely for the purpose of licensing such transmitter in accordance with the provisions of § 8.21 will be given formally by the Commission subsequent to a satisfactory showing of compliance made by the applicant. The necessary showing of compliance shall, as a minimum, be in the form of a written statement (together with such supplemental charts, graphs, illustrations, etc., as may be deemed appropriate by the applicant for type approval) over the signature of a competent radio engineer attesting to actual technical performance of the transmitter in accordance with all pertinent rules, regulations, and international agreements which must be met by the class of station for which the transmitter is intended to be licensed.

(b) Request for type approval and showing of compliance pursuant to the provisions of paragraph (a) of this section shall be submitted in duplicate to the Commission at Washington 25, D. C., and shall be designated for attention of the Marine Division. One copy of such showing of compliance shall be signed under oath or affirmation by the engineer who conducted or supervised the related technical performance of the particular type of transmitter for the purpose of securing type approval by the Commission.

(c) In the event the written showing of compliance prescribed by paragraphs (a) and (b) of this section is deemed by the Commission to not furnish all information or data which it requires for the purpose of giving type approval to a particular type of radio transmitter, the Commission may supplementally require the applicant for such type approval to demonstrate by actual operation of the involved equipment in the presence of one or more engineers of the Commission that the same will, in fact, comply with all pertinent rules, regulations, and international agreements. In the event the showing of compliance is finally adjudged by the Commission to be unsatisfactory for the purpose of type approval for licensing of the particular type of transmitter, such type approval will not be given and that type of transmitter will not be licensed for the involved class of station.

§ 8.137 *Special requirements for radiotelephone transmitters.* (a) Except as provided otherwise in paragraph (b) of this section, and except for transmitters authorized solely for developmental stations, each radiotelephone transmitter first licensed by the Commission after July 1, 1951, for use and operation in a ship station or a marine-utility station, and all radiotelephone transmitters licensed by the Commission after January 1, 1958, for use and operation in ship stations and marine-utility stations, shall be provided with a device that will automatically prevent modulation in excess of 100 percent. This requirement however, shall not apply to transmitters incapable of a plate input power exceeding three watts which are authorized for marine-utility stations and other stations of portable nature.

(b) Each radiotelephone transmitter of a ship station or a marine-utility station shall be type-approved by the Commission prior to its operation by any unlicensed person pursuant to the provisions of paragraph (a) of § 8.155. In addition to complying with all other applicable rules and regulations, such a transmitter shall meet the following requirements:

(1) Operation of the transmitter shall require only the use of simple external switching devices excluding all manual adjustment of radio frequency determining elements;

(2) The required radio frequency stability of the transmitter must be maintained (at all times during such operation by an unlicensed person) by the transmitter itself;

(3) None of the operations necessary to be performed during the course of normal rendition of service of the station shall be capable of causing any radiation of emission on an unauthorized frequency; and

(4) The transmitter shall be provided with a device that will automatically prevent modulation in excess of 100 per cent during negative modulation "peaks" (when the carrier wave is reduced to its minimum strength by the modulating frequencies). This requirement, however, shall not apply to transmitters incapable of a plate input power exceeding three watts which are authorized for marine-utility stations and other stations of portable nature.

(c) (1) Each radiotelephone transmitter authorized in a ship station license or a marine-utility station license granted, modified, or renewed by the Commission after July 1, 1951, for use and operation at frequencies above 30 Mc (other than transmitters authorized solely for developmental stations), must be a type which is approved by the Commission pursuant to the provisions of § 8.136.

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[4] An artificial antenna having a capacitance of 750 micromicrofarads and an effective resistance of 4 ohms at a frequency of 500 kilocycles shall be employed for the measurement of the power output of receiving equipment at frequencies between 350 kilocycles and 515 kilocycles. The constants of artificial antennas for tests at other frequencies will be supplied upon request to the Commission.

(2) Before being finally considered for type-approval, such transmitters shall, in addition to meeting all other applicable requirements, comply with the following limitations and operating conditions:

(i) When radiating F1, F2, or F3 emission on each marine radio-channel within the frequency-band 35 Mc to 44 Mc, with 100 percent[8] modulation applied, the frequency deviation[8] shall not exceed 12 kc.

(ii) When radiating F1, F2, or F3 emission on each marine radio-channel within the frequency-band 156 Mc to 158 Mc, with 100 percent[8] modulation applied, the frequency deviation[8] shall not exceed 15 kc.

(iii) When radiating class F1, F2, or F3 emission on each radio-channel within the frequency-band 35 Mc to 44 Mc, any emission appearing on any radio frequency removed from the carrier frequency by not less than 18 kc nor more than 36 kc shall be attenuated 25 decibels or more below the intensity of the unmodulated carrier. Any emission appearing on any radio frequency removed from the carrier frequency by more than 36 kc shall be attenuated 60 decibels or more below the intensity of the unmodulated carrier, provided that for transmitters incapable of plate input power of more than 3 watts, this attenuation shall be 40 decibels or more below the intensity of the unmodulated carrier.

(D) When radiating class F1, F2, or F3 emission on each marine radio-channel within the frequency-band 156 Mc to 158 Mc, any emission appearing on any radio frequency removed from the carrier frequency by not less than 21 kc nor more than 42 kc shall be attenuated 25 decibels or more below the intensity of the unmodulated carrier. Any emission appearing on any radio frequency removed from the carrier frequency by more than 42 kc shall be attenuated 60 decibels or more below the intensity of the unmodulated carrier, provided that for transmitters incapable of plate input power of more than 3 watts, this attenuation shall be 40 decibels or more below the intensity of the unmodulated carrier.

§ 8.138 *Special requirements for ship radar transmitters.* (a) Each radar transmitter authorized in any ship radar station license granted, modified, or renewed by the Commission after July 1, 1950 (other than licenses for developmental stations) must be type-approved by the Commission pursuant to § 8.136. In addition to meeting all other applicable requirements, such transmitters shall, in addition, comply with the limitations and conditions set forth in the following paragraph.[9]

(b) (1) The design and construction of the radar transmitter shall be such that, when properly installed, its use will not produce harmful interference to any other radiolocation service or any maritime mobile service;

(2) The radar transmitter shall not have means available for any external adjustment(s) which can result in a deviation from the terms of the station authorization or any deviation from the applicable technical requirements for ship radar stations stipulated in this part.

SUBPART F—OPERATOR REQUIREMENTS

§ 8.151 *Authorized operator required.* (a) Except as otherwise provided in § 8.155 or by any applicable order of the Commission, the actual operation of all transmitting apparatus in any radio station in the maritime mobile or maritime radiolocation service on board a ship of the United States shall be carried on only by a person holding an operator license issued by the Commission in accordance with Part 13 of the Commission's rules.

(b) When the station is used for telephony, the person lawfully in control of the station may, if authorized by the station licensee or the master (acting in this respect as the station licensee's agent), permit any person to speak over the station microphone: *Provided*, That such person in control shall continue to exercise his control so as to insure the continued proper operation of the station.

§ 8.152 *Operator required by statute for safety.* (a) The radio installation required by Part II of Title III of the Communications Act or by the Safety Convention, for purposes of safety on board a ship of the United States, shall be in charge of and shall be operated only by one or more qualified operators[1] who shall be subject to the lawful authority of the master.

(b) Each cargo ship of the United States required by Part II of Title III of the Communications Act to be fitted with a radio installation and not exempted therefrom by the Commission, which is not fitted with an auto-alarm, and each passenger ship required by that statutory provision to be fitted with a radio installation and not exempted therefrom by the Commission, shall, for safety purposes, carry at least two qualified operators.

(c) Each cargo ship of the United States required by Part II of Title III of the Comunications Act to be fitted with a radio installation and not exempted therefrom by the Commission, which is fitted with an auto-alarm in accordance with that statutory provision, shall, for safety purposes, carry at least one qualified operator who shall have had at least six months previous service in the aggregate as a qualified operator in a station on board a ship or ships of the United States.

§ 8.153 *Operator required by Safety Convention.* (a) Each ship of the United States which is not subject to Part II of Title III of the Communications Act but which is required by the radio provisions of the Safety Convention[2] to be fitted with a radio installation, which has not been exempted therefrom by the Commission, shall, for safety purposes, carry at least one qualified[3] operator. If not fitted with an auto-alarm in proper operating condition, at least two qualified[3] operators shall be carried for this purpose by—

(1) A passenger ship of the United States.

(2) A Cargo ship of the United States of more than 5,500 tons gross tonnage.

§ 8.154 *Location of authorized operator.* (a) Whenever the transmitting apparatus of a station in the maritime mobile service subject to this part is being used or operated, and the provisions of section 318 of the Communications Act (in so far as such provisions require the actual operation of such apparatus only by a person holding an operator's license of the proper class issued by the Commission) are not waived by the Commission, at least one person holding an operator license of the proper class as prescribed in Part 13 of the Commission's rules shall be on duty at the place where such transmitting apparatus is located and, subject to the lawful authority of the master, shall be in charge of the station; provided that in lieu of the transmitter location, such operator may be on duty at a different location on the ship when—

(1) Such apparatus is installed and protected so that it is not accessible to and may not be placed in an operating condition by other than duly authorized persons; and

(2) The transmitting and associated receiving apparatus can be operated from such other location in a manner which will fully comply with all applicable rules of the Commission and the terms of the station license; and without any delay in normal operation being introduced by such arrangement.

§ 8.155 *Waivers of operator license*—(a) *For VHF telephony.* Subject to the conditions hereinafter stated, the provisions contained in section 318 of the Communications Act are waived, in so far as such provisions require any person to hold an operator's license in order to operate, during the course of normal rendition of service, any ship station (including developmental ship stations) or marine-utility station on board ship, in the maritime mobile service, when such station is authorized to use telephony only and further is authorized to be operated exclusively on one or more radio-channels above 30 Mc: *Provided*,

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[8] See paragraphs (v), (w) and (aa) of § 8.7.

[9] See also § 8.155.

[1] A qualified operator for the purpose of this section on a ship of the United States is a person holding a radio operator's license of the proper class, as prescribed and issued by the Commission. See Part 13 of the Commission's rules and/or any applicable orders promulgated by the Commission.

[2] As prescribed by the Safety Convention, London, 1929; this requirement as well as others are subject to change when the Safety Convention, London, 1948, becomes effective.

[3] A qualified operator for this purpose is a person holding a certificate complying with the provisions of the International Radio Regulations (see Article 24 of the Radio Regulations of Atlantic City, 1947): *Provided, however*, That the operation of transmitting apparatus in all ship stations of the United States is subject to the provisions of § 8.151.

(1) The person who operates the transmitting equipment is the station licensee or is authorized by the station licensee to do so, and the use of the station during such operation is subject to the lawful direction and authority of the person who, at the time, occupies the position of the master of the ship on which the station is located;

(2) The station uses one or more of the following classes of emission only: A3 or F3 for telephony; and on the same radio-channels as are authorized for telephony A0, A2, F0, F2 solely for transmitting by automatic means attention signals, signals for actuating selective calling devices, for brief testing of the authorized apparatus, or station identification, or signals in an emergency involving safety;

(3) The station is authorized to use transmitting equipment only of a type which is approved by the Commission for operation in this service by unlicensed persons in accordance with this subsection;

(4) The transmitting equipment operated by an unlicensed person in accordance with this subsection is not required on board the ship for safety purposes by any statutory provisions or by any international agreement or treaty in force;

(5) All transmitter adjustments or tests during or coincident with the installation, servicing, or maintenance of the station that may affect its proper operation shall be made by or under the immediate supervision and responsibility of a person holding an operator license of the proper class for this purpose as prescribed in Part 13 of the Commission's rules;

(6) Subsequent to any transmitter adjustments made in accordance with subparagraph (5) of this paragraph, and at all other times, the station licensee shall be responsible for determining that the transmitting equipment continues to meet the conditions established by the Commission relative to approval of the particular type of equipment for the purpose of operation by unlicensed persons;

(7) The station licensee or the person(s) authorized by the licensee to operate the station shall, in lieu of a licensed operator, be on duty as prescribed by § 8.154 for a licensed operator;

(8) Nothing contained in this paragraph shall be construed to change or diminish in any respect the responsibility of the station licensee for having and maintaining control of the station or for proper functioning and operation of the station in accordance with law;

(9) No unlicensed person, authorized as provided by this paragraph to operate a station, may lawfully perform any act in relation to such station that he could not lawfully perform if he were acting under the authority of a radio operator license issued in his behalf by the Commission.

(b) *For ship radar.* (1) Effective on and after January 2, 1951, no radio operator license is required for the operation on board ship, during the course of normal rendition of service, of ship radar stations licensed in the radiolocation[4] service, provided that the following conditions are met or provided for by the licensee of the station:

(i) The radar equipment shall employ as its frequency determining element a non-tunable, pulse-type magnetron.

(ii) The radar equipment shall be capable of being operated during the course of normal rendition of service in accordance with the radio law and the rules and regulations of the Commission by means of exclusively external controls, and

(iii) Operation during the course of normal rendition of service pursuant to this subparagraph, must be performed exclusively by the master of the radar-equipped ship or by one or more other persons responsible to him and authorized by him to do so.

(2) All adjustments or tests during or coincident with the installation, servicing, or maintenance of the equipment while it is radiating energy must be performed by or under the immediate supervision and responsibility of a person holding a first or second class commercial radio operator license, radiotelephone or radiotelegraph, containing a ship radar endorsement, who shall be responsible for the proper functioning of the equipment in accordance with the radio law and the Commission's rules and regulations and for the avoidance and prevention of harmful interference from improper transmitter external effects: *Provided, however,* That nothing in this sub-subsection shall be construed to prevent persons not holding such licenses or not holding such licenses so endorsed from making replacements of fuses or of receiving-type tubes.

(3) Nothing in this paragraph shall be construed to change or diminish in any respect the responsibility of any ship radar station licensee for having and maintaining control over the station licensed to him, or for the proper functioning and operation of such station in accordance with the terms of the station license.

§ 8.156 *Posting of operator license.* (a) When a licensed operator is required for the operation of a station subject to this part, each licensed operator involved shall observe the applicable requirements of Part 13 of the Commission's Rules with respect to the posting of operator licenses. During official inspection of the station at a port of any country which is a party to the International Radio Regulations, the operator must facilitate the examination of his operator license when requested to do so by the official(s) responsible for inspection of the station.

(b) The requirement of paragraph (a) of this section with respect to posting of operator licenses shall not apply to stations on board small boats if the posting of a license in the manner required by Part 13 of the Commission's rules is impracticable, upon the express condition that the licensed radio operator engaged in operating the station shall have on his person either his required operator license or a duly issued verification card (FCC Form 758-F) attesting to the existence of that license.

SUBPART G—GENERAL OPERATING REQUIREMENTS

§ 8.171 *International Regulations applicable.* In addition to being regulated by applicable rules of this part, the use and operation of stations subject to this part shall be governed by applicable provisions of the International Radio Regulations and the applicable radio provisions of all other international agreements in force to which the United States is a party.

§ 8.172 *Authority in event of distress.* No provision of the International Radio Regulations shall prevent a ship in distress from using any means of telecommunication available to it for drawing attention, signalling its position, and obtaining help. A distress call and message, however, shall be transmitted only on the authority of the master of, or the person responsible for, the ship from which this call and message are transmitted. No person shall, by means of any station subject to this Part, knowingly transmit, or cause to be transmitted, any false or fraudulent signal of distress or communications relating thereto.

§ 8.173 *Authority of the master.* Except as may be regulated by law or international agreement or by the rules of the Commission, the radio service of each station on board ship shall at all times be under the supreme control of the master. In time of war, no provision of the Commission's rules and regulations shall prevent the master of any vessel of the United States from taking any action whatsoever in regard to the radio installation, the operators, the transmission and receipt of messages, and the radio service of the ship whenever in his discretion such action is necessary to carry out the instructions of United States naval control officers and other instructions issued by the United States Navy.

§ 8.174 *Secrecy of communication.* The master or the person responsible, as well as all persons who may have knowledge of the text or even of the existence of the radio communications transmitted or received by a station on board ship or of any information whatever obtained by means of the radiocommunication service of such station, shall be under the obligation of observing and insuring the secrecy of Communications to the extent required by the Communications Act and the International Radio Regulations.[5]

§ 8.175 *Intercommunication in mobile service.* Each ship station in the maritime mobile service at sea shall, within the scope of its normal operations, be bound to exchange radio communications or signals with any other ship station or aircraft station in the maritime mobile service at sea or with any public coast station in the maritime mobile service provided that such exchange of radio communication shall be without distinction as to radio systems or instruments adopted by each station.

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[4] Ship radar stations heretofore licensed in the ship service are construed to be licensed in the maritime radiolocation service (including the maritime radionavigation service).

[5] See sections 501, 502, and 605 of the Communications Act; also Article 21 of the International Radio Regulations, Atlantic City, 1947.

§ 8.176 *Priority of communications to be observed.* Ship stations in the maritime mobile service shall observe at all times the priority of communications set forth in § 8.177; in particular, all such stations shall give absolute priority to radio communications or signals relating to any ship or aircraft in distress; shall, when any distress signal or communication is anticipated or intercepted, cease all transmission on frequencies which may interfere with any station hearing such radio communication or signal of distress except when engaged in answering or aiding the ship or aircraft in distress, and shall assist the vessel or aircraft in distress, so far as possible, by complying with its instructions.

§ 8.177 *Order of priority of communications.* (a) The order of priority of radiotelegraph communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international distress signal SOS) international automatic-alarm signals for distress purposes,[3] distress messages, and distress traffic.

(2) Communications preceded by the international radiotelegraph urgency signal "XXX".

(3) Communications preceded by the international radiotelegraph safety signal "TTT".

(4) Communications relative to radio direction-finding bearings.

(5) Communications relative to the navigation and safe movement of aircraft.

(6) Communications relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(7) Government communications for which priority right has been claimed.

(8) Service communications relating to the working of the radiocommunication service or to communications previously transmitted.

(9) All other communications.

(b) The order of priority of radiotelephone communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international telephone distress signal MAYDAY and the telegraphic distress signal SOS transmitted by either telegraphy or telephony), distress messages, and distress traffic.

(2) Communications preceded by the international radiotelephone urgency signal "PAN", or known to the station licensee or his agent to consist of one or more urgent messages concerning the safety of a ship, aircraft, or other mobile unit or of some person on board or within sight of the ship, aircraft, or mobile unit.

(3) Communications preceded by the international radiotelephone safety signal "SECURITE", or known to the station licensee or his agent to consist of one or more messages concerning the safety of navigation or important meteorological warnings.

(4) Communications known to the station licensee or his agent to consist of one or more messages relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(5) Government communications for which priority right has been claimed.

(6) All other communications.

§ 8.178 *Unauthorized transmissions.* Stations operating in the maritime mobile service shall not engage in radiocommunication which is superfluous or unnecessary in this service. Except in an emergency which requires otherwise, the transmission by ship stations of signals or communications not addressed to an authorized station or stations in the maritime mobile service is prohibited unless radiotelegraphy is used and the transmisison, preceded by CQ or CP in accordance with the International Radio Regulations, is intended to be intercepted by authorized stations of the maritime mobile service.

§ 8.179 *Control by coast or government station.* When communicating with a coast station or any government station in the maritime mobile service, ship stations shall, except when transmitting distress signals or controlling distress traffic, comply with instructions given by the coast station or government station relative to the order and time of transmission, to the choice of authorized frequency, to the suspension of communication, and to the permissible type of message traffic that may be transmitted or received by the particular coast station or government station. This provision, however, does not apply in the event of distress, either actual or impending.

§ 8.180 *Cooperative use of frequency assignments.* Unless provided otherwise in this part, or in the particular station authorization, each radio-channel authorized for use by a station on board ship subject to this part is available for such use on a shared basis only and shall not be construed as available for the exclusive use of any one station or any one station licensee. All station licensees shall cooperate in the use of their respective frequency assignment in order to minimize interference and obtain the most effective use of the authorized radio-channels.

§ 8. 181 *Prevention of interference.* (a) From the standpoint of interference, the operation of a ship radio station (including receiving equipment, auto-alarm, and direction finder) required by law to be installed on board a vessel for safety purposes, shall have priority over the operation of any other radio apparatus on board the same vessel.

(b) Before commencing transmission (other than signals of distress) a ship station shall make sure that it will not cause interference to communications in the maritime mobile service being carried on within its range. For this purpose, the operator attending the station shall, before commencing transmission, use the necessary receiving installation to listen on the appropriate frequency or frequencies. If interference is likely, the station shall wait until the existing communications, which it may disturb, have been concluded; with due regard, nevertheless, for the priority of communications designated in § 8.177.

(c) Whenever a radiocommunication in the maritime mobile service is already in progress between two mobile stations or between a mobile station and a coast station and it appears to be interfered with by a subsequent transmission from another mobile station, the latter must cease transmitting at the first request of either of the other two, except as priority may be otherwise determined by § 8.177. The station requesting this cessation must indicate the approximate length of the wait imposed upon the mobile station whose transmission is suspended.

(d) Except in cases of distress, communications between ship stations or between ship and aircraft stations must not interfere with the work of coast stations. When this work is thus interfered with, the ship or aircraft station which causes it must stop transmitting or change frequency upon the first request of the coast station concerned.

(e) Ship stations when operating on a frequency below 3500 kilocycles or above 30 Mc shall not carry on, or attempt to carry on, communication with any station which, under the currently prevailing conditions of transmission or reception, is not within reliable communication range of the ship station: *Provided*, That this provision shall not apply in event of distress, either actual or impedening.

§ 8.182 *Suspension of transmission.* Transmission shall be suspended immediately upon detection or notification of a deviation from the technical requirements of the station authorization until such deviation is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission shall be suspended as soon as the emergency is terminated.

§ 8.183 *Hours of service.* (a) Ship stations whose service is not continuous may not close before:

(1) Finishing all operations resulting from a distress call, or urgency or safety signal;

(2) Exchanging, so far as practicable and within the scope of their normal operation, all traffic originating in or destined for public coast stations situated within their range and mobile stations which, being within their range, have indicated their presence before the actual cessation of communication.

§ 8.184 *Maintenance of station log.* (a) Each station on board ship subject to this part which is required, under the provisions of this part pertaining to the particular class of station, to keep a radio station log, shall, in addition, comply with the applicable provisions of the following subsections of this section; the station licensee and the licensed radio operator (when a licensed operator is required) in charge of the station shall be responsible for compliance with this section:

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[3] The international auto alarm signal intended for use primarily in radiotelegraphy consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between two consecutive dashes being one second.

(b) The log shall be kept in an orderly manner, in usable form, and in such detail that the information required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if their proper meaning or explanation is contained elsewhere in the same log.

(c) The station log or any portion thereof shall not be erased, obliterated, or wilfully destroyed within the period of retention required by § 8.115. However, during this period any necessary correction may be made of such log but only by the person originating the entry and that person shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

SUBPART H—WATCHES AND AUTO-ALARMS FOR SAFETY PURPOSES

§ 8.201 *Watch required by International Radio Regulations.* All ship stations employing telegraphy (either compulsorily or voluntarily provided with a radiotelegraph installation) and normally keeping watch on frequencies in the authorized bands between 365 and 515 kc shall, during their hours of service, take the necessary measures to insure an efficient watch by a duly licensed radiotelegraph operator on the international distress frequency 500 kc for three minutes twice each hour, beginning at x h 15 and x h 45, Greenwich mean time (G. M. T.). For this purpose, either a head receiver or a loudspeaker may be used, on condition that use of the loudspeaker is no less effective than use of the head receiver. While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for example, broadcast receivers, or amateur transmitters or receivers) not actually required for maritime mobile service.

§ 8.202 *Watch required by Communications Act.* (a) Each ship of the United States required by Part II of Title III of the Communications Act and the rules of the Commission to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission shall, while being navigated outside a harbor or port, keep a continuous and efficient watch on the international distress frequency 500 kc by means of qualified radiotelegraph operators: *Provided, however*, That in lieu thereof on a cargo ship fitted with an auto-alarm in proper operating condition, a watch of at least eight hours per day,[1] in the aggregate, shall be maintained as herein prescribed by means of a qualified radiotelegraph operator: *Provided, further*, That in either instance such operator(s) shall be subject to the conditions and limitations prescribed by § 8.204.

(b) In accordance with the requirement set forth in subsection (a) for a cargo ship fitted with an auto-alarm in proper operating condition, when such vessel is navigated outside a harbor or port, the watch as prescribed in paragraph (a) of this section shall be maintained by means of a qualified radiotelegraph operator for at least one-third of each day, or portion thereof, during the period of time the vessel is so navigated.

§ 8.203 *Watch required by Safety Convention.* (a) The following subsections of this section are applicable to ships of the United States subject to the radio provisions of the Safety Convention but not at the same time subject to the provisions of Part II of Title III of the Communications Act (for example, certain ships engaged on an international voyage, no part of which is in the open sea).

(b) Each ship of the United States, except cargo ships of 5,500 tons gross tonnage or less, required by the Safety Convention to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission shall, if not fitted with an auto-alarm in proper operating condition, while at sea, keep a continuous and efficient watch on the international distress frequency 500 kc by means of qualified radiotelegraph operators.

(c) Each cargo ship of the United States of 5,500 tons gross tonnage or less required by the Safety Convention to be fitted with a radiotelegraph installation and not exempted therefrom by the Commission shall, if not fitted with an auto-alarm in proper operating condition, while at sea, keep an efficient watch on the international distress frequency 500 kc by means of a qualified radiotelegraph operator for at least eight hours per day, in the aggregate.

(d) In keeping the watch prescribed in paragraph (b) and (c) of this section, the operator(s) shall be subject to the conditions and limitations prescribed by § 8.204.

(e) The use of a certified watcher in lieu of a qualified radiotelegraph operator for the purpose of complying with this section is not authorized for ships of the United States.

(f) In accordance with the requirement set forth in paragraph (c) of this section for cargo ships of 5,500 tons gross tonnage or less and not fitted with an auto-alarm in proper operating condition, when such vessel is at sea, the watch as prescribed in paragraph (c) shall be maintained by means of a qualified radiotelegraph operator for at least one-third of each day, or portion thereof, during the period of time the vessel is so navigated.

§ 8.204 *Provisions governing safety watch.* (a) For the purpose of maintaining the watch prescribed in §§ 8.202 and 8.203, the operator shall use an effectively operating main or emergency radio receiver complying with the applicable requirements of § 8.503 or § 8.504, respectively, and either a head receiver or a loudspeaker complying with the applicable requirements of § 8.503 or § 8.504, respectively, on condition that use of the loudspeaker is not less effective than use of the head receiver".

(b) While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for example, broadcast receivers or amateur transmitters or receivers) not actually required for maritime mobile service.

(c) During the period of this watch and subject to the provisions of § 8.205, the operator may temporarily interrupt the required listening on the frequency 500 kc while he is transmitting on 500 kc operating the ship station equipment on any other frequency authorized for transmission or reception in the maritime mobile service, or performing other radio duties considered essential by the master within the scope of his authority under section 358 of the Communications Act, if it is not possible to maintain at the same time, by any practicable means,[2] the watch on 500 kc. The provisions of this paragraph shall not relieve the ship of the requirement for maintaining a watch on the international distress frequency 500 kc during the international silent periods as prescribed in § 8.201.

§ 8.205 *Compulsory use of auto-alarm.* (a) The auto-alarm, when provided on a ship compulsorily fitted with a radiotelegraph installation for the purpose of compliance with Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, shall be in operation, connected to a suitable antenna,[3] and adjusted for normal efficiency according to prevailing conditions of radio reception, at all times while the ship is being navigated outside a harbor or port—

(1) When the operator is not on watch duty;

(2) When the operator is on watch duty but is engaged over an extended period—

(i) In transmitting (provided such transmission does not adversely affect the operation of the auto-alarm) or receiving on a frequency authorized for use in the maritime mobile service (other than 500 kc), if it is not possible as prescribed by paragraph (c) of § 8.204 for the operator to maintain, at the same time, by any practicable means, the watch on 500 kc; or

(ii) In performing other radio duties considered essential by the master within the scope of his authority under section 358 of the Communications Act if it is not possible as prescribed by paragraph (c) of § 8.204 for the operator to maintain, at the same time, by any practicable means, the watch on 500 kc.

(b) The provisions of paragraph (a) (2) of this section shall not relieve the ship of the requirement for maintaining a watch on the international distress frequency 500 kc during the international silent periods as prescribed in § 8.201.

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[1] The term "day" for the purposes of this subpart is defined in paragraph (l) of § 8.2.

[2] Any practicable means of maintaining this watch would include a loudspeaker or a head receiver energized, if necessary, by an additional radio receiver (other than the receiver actually in use for non-watch purposes) which is tuned to 500 kc.

[3] For example, a main antenna as defined in paragraph (a) of § 8.8.

§ 8.206 *Procedure in use of auto-alarm.* (a) Paragraphs (b) and (c) of this section shall apply to the use of an auto-alarm which is provided for the purpose of compliance with Part II of Title III of the Communications Act or the radio provisions of the Safety Convention on a ship compulsorily fitted with a radiotelegraph installation under that act or under the radio provisions of that Convention.

(b) While the ship is being navigated outside a harbor or port, the auto-alarm shall be tested at least once every 24 hours by means of the testing device supplied as part of the alarm, the timing of the dashes to be made by reference to the second hand of the ship station clock. A test also shall be made to determine that the auto-alarm mechanism is operated in a normal manner by signals from other stations which are received on the frequency 500 kc. A statement that the foregoing requirement has been fulfilled must be inserted in the radio station log daily.[4]

(c) The qualified operator, when going off watch, shall report to the officer on watch on the bridge whether or not the auto-alarm has been placed in use and adjusted for effective operation as prescribed in paragraph (a) (1) of § 8.205.

SUBPART I—GENERAL PURPOSE WATCHES

§ 8.221 *Watch on 500 kc.* Ship stations using frequencies in the authorized bands between 365 and 515 kc shall, during their hours of service, remain on watch on the calling frequency 500 kc except when the operator is transmitting on 500 kc, operating the ship station equipment on any other frequency authorized for transmission or reception in the maritime mobile service (including maintenance of the watch on 143 kc as provided by § 8.222) if it is not possible to maintain at the same time, by any practicable means,[1] the watch for calls on 500 kc. The provisions of this section, however, shall not relieve the ship from complying with the requirements for a safety watch as prescribed in §§ 8.201, 8.202 and 8.203.

§ 8.222 *Watch on 143 kc.* On condition that compliance with the following requirement shall in no way interrupt or reduce the efficiency of the safety watch prescribed in §§ 8.201, 8.202, and 8.203, each ship station equipped for communication by means of class A1 emission on frequencies within the band 100 to 160 kc shall, during its hours of service when not engaged in communication with another station of the maritime mobile service, keep watch for calls every hour on the frequency 143 kc for five minutes beginning at x h 35, Greenwich mean time (G. M. T.).

§ 8.223 *Watch on 2182 kc.* (a) Each ship telephone station on board a ship navigating the Great Lakes and licensed to transmit on one or more frequencies within the band 1600 to 4000 kc shall, during its hours of service, maintain an efficient watch for the reception of class A3 emission on the radio-channel of which 2182 kc is the assigned frequency, whenever the station is not being used for transmission on that channel or for communication on other radio-channels.

(b) Effective on and after January 1, 1954, except as provided in paragraph (c) of this section, each ship telephone station licensed to transmit on one or more frequencies within the band 1600 to 4000 kc shall, during its hours of service, maintain an efficient watch for the reception of class A3 emission on the radio-channel of which 2182 kc is the assigned frequency, whenever such station is not being used for transmission on that channel or for communication on other radio-channels. When the ship station is in Region 1 or 3, this watch shall, in so far as is possible, be maintained at least twice each hour for three minutes commencing at x h 00 and x h 30, Greenwich mean time (G. M. T.).

(c) With respect to ship stations on board vessels when within 300 nautical miles of Charleston, South Carolina, Jacksonville, Florida, or Wilmington, California, or within 600 miles of Vancouver, British Columbia, the requirement of paragraph (b) of this section shall become effective only when specifically ordered by the Commission.

SUBPART J—PROCEDURE IN EVENT OF DISTRESS

§ 8.231 *Applicable regulations.* In addition to the governing provisions of the International Radio Regulations[1] applicable to the transmission and interception of distress signals and the handling of distress traffic and the special provisions of §§ 8.61 and 8.172 of this part, mobile stations which are subject to this part shall, in cases of distress, be governed by the following sections of this subpart.

§ 8.232 *Radio-channels for distress.* (a) In case of distress in the maritime service, the frequency to be used shall be the international distress frequency 500 kc[2] with maximum power obtainable; the class of emission to be used if possible shall be A2. Stations which cannot transmit on 500 kc[2] or use A2 emission shall, if possible use their normal calling frequency and normal class of emission with maximum power obtainable.

(b) Until such time as the frequency 2182 kc[2] is effectively guarded for the reception of distress calls[3] mobile stations in regions of the United States (other than the Great Lakes region) not capable of using 500 kc but equipped to use telephony on medium frequencies may, in case of distress only, communicate with stations of the United States Coast Guard on the frequency 2670 kc.[2] In the Great Lakes region, the frequency 2182 kc[2] should be used at any time for radiotelephone distress calls in lieu of the frequency 2670 kc.

§ 8.233 *Form of distress call.* (a) The distress call transmitted by radiotelegraphy comprises:

(1) The international distress signal (. . . — — — . . .) formed as a single signal in which the dashes must be emphasized so as to be distinguished clearly from the dots (this call in each instance is transmitted 3 times);

(2) The signal "de"; and

(3) The call sign of the mobile station in distress (transmitted 3 times in each instance).

(b) The distress call, when transmitted by radiotelephony comprises the word "MAYDAY" (pronounced as the French expression "m'aider") spoken three times, followed by identification of the mobile station in distress; the whole repeated three times in each instance.

§ 8.234 *Radiotelegraph alarm signal.* The distress call, when transmitted by radiotelegraphy on the frequency 500 kc, should, if possible, be preceded by the international alarm signal transmitted by means of class A2 emission on 500 kc. This alarm signal consists of a series of 12 dashes transmitted in one minute, the duration of each dash being 4 seconds and the duration of the interval between 2 consecutive dashes being one second. The distress signal (. . . — — — . . .) shall be transmitted 3 times immediately after the alarm signal, in order to operate such automatic apparatus as may be designed to be actuated by the normal distress signal on 500 kc. When circumstances permit, an interval of 2 minutes shall be observed after transmission of the alarm signal and distress signal, before transmitting the distress message on 500 kc, to allow time for operators warned by these signals to go on watch.

§ 8.235 *Distress message.* (a) The distress call, must be followed, as soon as possible, by the distress message which comprises:

(1) The distress call;

(2) The name of the mobile station in distress;

(3) The particulars of its position;

(4) The nature of the distress;

(5) The kind of assistance desired; and

(6) Any other information which might facilitate rescue.

(b) When telegraphy is used, the distress message shall be transmitted by means of the International Morse code at a speed not exceeding 16 words per minute nor less than 8 words per minute.

(c) Where no reply to the distress signals or distress message has been received, these signals or this message shall be repeated at intervals (in radiotelegraphy especially during the 500 kc international silent periods), until a reply is received.

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[4] See subparagraph (5) of paragraph (b) of § 8.330.

[1] Any practicable means of maintaining this watch would include a loudspeaker or head receiver energized, if necessary, by an additional radio receiver (other than the receiver actually in use for non-watch purposes) which is tuned to 500 kc.

[1] See Article 37 of the International Radio Regulations, Atlantic City, 1947.

[2] This frequency corresponds to the carrier frequency or (when a carrier is not present) the frequency in the center of the emission-bandwidth.

[3] See §§ 8.106, 8.223, and 8.352.

§ 8.236 *Transmission for radiolocation.* After the transmission of its distress message, a mobile station shall when possible transmit a signal in the form of 2 telegraphic dashes of approximately 10 seconds duration each, followed by its call sign, to permit radio direction-finding stations (or other stations equipped for radiolocation) to determine its position. This transmission may be repeated by the mobile station, subject to the provisions of § 8.240, whenever it is requested to do so by other stations endeavoring to determine its position.

§ 8.237 *Acknowledgment of distress message.* Any station in the maritime service which receives a distress message relative to a vessel, aircraft, or other unit which is, beyond any possible doubt, in the vicinity of that station, shall, when it has appropriate transmitting apparatus available, immediately acknowledge receipt. If it appears that the vessel, aircraft, or other unit in distress is not in its vicinity, a short interval of time shall elapse before the station acknowledges receipt of the distress message, in order to permit stations that may be nearer to the location of the distress to reply and acknowledge receipt without interference. All stations in the maritime service which hear a distress signal or message must cease immediately any transmission capable of interfering with the distress signal or message and shall listen on the frequency used for the distress signal and message.

§ 8.238 *Form of acknowledgment by telegraphy.* (a) The acknowledgment of receipt of a distress signal or message is transmitted, when telegraphy is used, in the following form:

(1) Call sign of the mobile station in distress (transmitted 3 times);

(2) The signal "de";

(3) Call sign of the station acknowledging receipt (transmitted 3 times);

(4) The signal "RRR"; and

(5) The distress signal.

§ 8.239 *Information from acknowledging stations.* (a) Every mobile station which acknowledges receipt of a distress signal or message must, on the order of the master or person responsible for the ship, aircraft or other vehicle carrying the mobile station, transmit in message form, as soon as possible, the following information in the order shown:

(1) Its name;

(2) Its position;

(3) The course and speed at which it is proceeding toward the vessel, aircraft, or other unit in distress; and

(4) Estimated time of arrival at the scene of distress.

(b) Before transmitting this message, the station must insure that it will not interfere with the transmissions of other stations which are better situated to render immediate assistance to the vessel, aircraft, or other unit in distress.

§ 8.240 *Control of distress traffic.* (a) The control of distress traffic is the responsibility of the mobile station in distress, or the station which has transmitted the distress call. These stations may, however, delegate the control of the distress traffic to another station.

(b) When any station has assumed control of distress traffic, it shall be responsible for maintaining silence on the distress frequency, or the frequency being used for distress traffic, for all emissions except distress signals and distress traffic, and for clearing the distress frequency when the distress traffic has ceased.

(c) The station in distress or the station in control of the distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. In telegraphy, the service abbreviation "QRT" followed by the distress signal (. . . — — — . . .) is used to impose silence for this purpose.

(d) Any station engaging in radiocommunication with the mobile station in distress or with the station in control of the distress traffic may impose silence on any station which interferes with distress traffic. In telegraphy, this is indicated by using the signal "AS" (. — . . .) followed by the word "distress" and the call sign of the station imposing silence.

(e) The use of the radiotelegraph service abbreviation "QRT" followed by the distress signal (. . . — — — . . .) must be reserved, as far as possible, for the mobile station in distress and for the station controlling distress traffic.

(f) Any station which has been notified to cease transmission in connection with a situation of distress shall not resume transmission on any frequency which may cause interference to distress signals or traffic until notified by the station in control of the distress traffic that the distress traffic has ceased and transmission may be resumed, or until notified by the station issuing the original notice that transmission from the station in question will not interfere with the distress signals or traffic.

§ 8.241 *Supplementary transmissions.* (a) A mobile station located in the general vicinity of the vessel, aircraft, or other unit in distress shall, if possible and when deemed appropriate, upon authorization of the master or person responsible for the station, transmit the radiotelegraph alarm signal on the frequency 500 kc using the maximum available power and class A2 emission, when—

(1) A distress call has been transmitted and was not preceded by the alarm signal; or

(2) Upon audible reception of an alarm signal which appears to be ineffective by reason of improper timing, improper class of emission, insufficient signal strength, interference, or excessive deviation from the frequency 500 kc.

(b) When a mobile station has heard a distress call or distress message for which acknowledgment of receipt has not been given promptly, and when the intercepting station itself is not in a position to render assistance, it shall, subject to the authority of the master, make every effort possible to attract the attention of any station in the maritime service which appears to be in a position to render assistance. For this purpose, transmission of the distress call and distress message may be repeated, if possible on the frequency 500 kc using the maximum available power and if possible class A2 emission, and/or on such other frequency and with such other class of emission as may be deemed necessary or helpful. At the same time all necessary steps shall be taken to notify the authorities who may be able to intervene usefully.

(c) A mobile station which repeats a distress call or distress message shall follow it by the words "transmitted for (insert identity of mobile craft in distress) by", and thereafter its own call sign transmitted 3 times. In radiotelegraphy, the repetition of the distress call or distress message on 500 kc shall, when circumstances permit, be preceded by transmission of the 500 kc international alarm signal followed by an interval of 2 minutes.

SUBPART K—FOREIGN SHIP STATIONS IN UNITED STATES WATERS

§ 8.261 *Inspection of station.* (a) Pursuant to section 303 (n) of the Communications Act, and subject to the provisions of Article 23 of the International Radio Regulations, Atlantic City, 1947, and Articles 53, 54 and 55 of the Safety Convention, London, 1929, the radio installation on board any foreign ship within the territorial jurisdiction of the United States, which installation is subject to the provisions of any act, treaty, or convention binding on the United States, shall be available, at any reasonable time in any harbor, port, or place in the United States, for inspection by duly authorized representatives of the Commission at such frequent intervals as within the discretion of the Commission will insure compliance with applicable rules, regulations, laws, and treaties.

§ 8.262 *Installation for safety purposes.* (a) The provisions of Part II of Title III of the Communications Act, in so far as such provisions require certain radio apparatus in operating condition and one or more qualified[1] operators on board a ship which leaves or attempts to leave any harbor or port of the United States for a voyage in the open sea, apply to a ship of any foreign country except—

(1) A cargo ship of less than 1,600 gross tons;

(2) A ship of war;

(3) A ship belonging to a country which is a party to the Safety Convention and which ship carries a valid certificate exempting said ship from the radio provisions of that Convention, or which ship conforms to the radio requirements of such Convention or Regulations and has on board a valid certificate to that effect;

(4) A yacht of less than 600 gross tons not subject to the radio provisions of the Safety Convention;

(5) A vessel in tow; and

(6) A vessel leaving or attempting to leave any harbor or port of the United

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[1] For this purpose, a qualified operator is defined by the Communications Act to be "a person holding a certificate as such complying with the provisions of the General Radio Regulations annexed to the International Telecommunications Convention in force, or complying with an agreement or treaty between the United States and the country to which the ship belongs."

States for a voyage solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States or navigating solely on any of these waters.

§ 8.263 *Limitations on transmission.* (a) Sections 301 and 318 of the Communications Act, relative to station licenses and operator licenses, respectively, are not applicable to any person sending radiocommunications or signals on a foreign ship while the same is within the jurisdiction of the United States; however, such communications or signals shall be transmitted only in accordance with applicable rules of the Commission intended to prevent interference including, among others, the following subparagraphs:

(1) The frequency or frequencies and the class or classes of emission used shall be available for the operation being conducted pursuant to the allocation of frequencies to radio services and the use of classes of emission established by the International Radio Regulations and pursuant to the terms of all other applicable international treaties and agreements to which the United States is a party;

(2) The operation of the radio apparatus shall not cause interference with the normal communications of other radio services, and only the minimum power necessary for effective communication shall be used;

(3) The station shall comply with the applicable provisions of the International Radio Regulations and other applicable international treaties and agreements to which the United States is a party.

(4) The operation of transmitting apparatus employing Class B emission is prohibited in any harbor or port of the United States except for emergency communication or for necessary tests of brief duration.

(b) Any transmission by a station on board a foreign man-of-war shall, in addition to the provisions of paragraph (a) of this section, be governed also by the following provisions:

(1) Transmission by radio from any foreign man-of-war while the same is within the territorial waters of the United States is prohibited unless authorized by appropriate United States authorities and carried on in conformity with the provisions of paragraph (a) of this section. Normally, a request from a foreign man-of-war to use its radio transmitting apparatus while in United States ports and territorial waters shall be made to one of the United States naval district commandants[1] or, after arrival in port, to the senior United States Navy Officer present. When a Navy Officer is not present, request shall be made to the port authorities, or to the United States Navy at Washington, D. C.

SUBPART L—MESSAGE CHARGES

§ 8.271 *Distress messages.* No charge shall be made by any ship or station in the mobile service of the United States for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea.

§ 8.272 *Danger messages.* No charge shall be made by any ship station or other station in the maritime mobile service of the United States for the transmission, receipt, or relay of the information concerning dangers to navigation designated in § 8.303 (b), originating on a ship of the United States or of a foreign country.

§ 8.273 *Tariff filing required.* No charge shall be made for the service of any station on board ship subject to this part unless effective tariffs applicable to such service are on file with the Commission, pursuant to the requirements of section 203 of the Communications Act and Part 61 of the Commission's rules and regulations.

§ 8.274 *Responsibility for payment.* (a) Each ship station shall be responsible for the payment of all charges accruing to any other station(s) or facilities for the handling or forwarding of messages or communications transmitted by that station.

(b) The transmission by any ship station of information concerning dangers to navigation, made in compliance with the provisions of § 8.303 (b), to any station which imposes a charge for the reception, relay, or forwarding of the required information, shall be free of cost to the ship concerned and any communication charges incurred by the ship for transmission, relay, or forwarding of the information may be certified to the Commission for reimbursement out of moneys appropriated to the Commission for that purpose.

§ 8.275 *Ship position reports.* Any common carrier subject to the Communications Act may furnish reports of positions of ships at seat to newspapers of general circulation, either at a nominal charge or without charge, provided the name of such common carrier is displayed along with such ship position reports.

§ 8.276 *Free safety service.* Notwithstanding any other provision of law, any ship station may render free service in connection with situations involving the safety of life and property, including hydrographic reports, weather reports, reports regarding aids to navigation and medical assistance to injured or sick persons on ships and aircraft at sea: *Provided,* That the Commission, from time to time under particular circumstances, may impose specific limitations on such free service to the extent it finds desirable in the public interest.

§ 8.277 *Free service for national defense.* Any common carrier subject to the Communications Act may render to any agency of the United States Government free service in connection with the preparation for the national defense. Every such carrier rendering any such free service shall make and file in duplicate, with the Commission, on or before the 31st day of July and on or before the 31st day of January in each year, reports covering the periods of 6 months ending on the 30th day of June and the 31st day of December, respectively, next prior to said dates. These reports shall show the names of the agencies to which free service was rendered pursuant to this paragraph, the general character of the communications handled for each agency, and the charges in dollars which would have accrued to the carrier for such service rendered to each agency if charges for all such communications had been collected at the published tariff rates.

SUBPART M—NATURE OF SERVICE PROVIDED BY SHIP STATIONS AND SHIPBOARD MARINE-UTILITY STATIONS

§ 8.301 *Supplemental eligibility requirements.* Subject to the basic eligibility requirements set forth in § 8.23, authorizations for limited ship stations, marine utility stations, or public ship stations may be granted to any person, or state or local government subdivision, or any agency of the Federal government which is subject to the provisions of section 301 of the Communications Act: *Provided:* That when the availability of the frequency assignment requested, or any part thereof, is specifically dependent upon the activity and/or the routes of voyage of the vessel, the application shall clearly show eligibility of the vessel for such station authorization under the provisions of this part which govern the assignment of frequencies: *And provided further,* That:

(a) An applicant for an authorization to operate a public ship station must request a frequency assignment on which the transmission of public correspondence is not excluded by any of the provisions of this part (although additionally he may request any other frequency assignment).

(b) An applicant for an authorization to operate a limited ship station or a marine utility station must request a frequency assignment on which the transmission of public correspondence is excluded.

§ 8.302 *Points of communication.* Subject to the conditions and limitations imposed by the terms of the particular station license or by applicable provisions of this part with respect to the use of particular radio channels, limited ship stations, marine-utility stations on board ships, and public ship stations are authorized to communicate with any station in the maritime mobile service including such other classes of stations as may be appropriately authorized in accordance with the provisions of this part for such communication: *Provided, however,* That for purposes of public correspondence between ship and shore, public ship stations are authorized to communicate only with public coast stations.

§ 8.303 *Service requirements for all ship stations.* (a) Unless prohibited by the terms of the station license or by other sections of this part relative to the limited use of a specifically designated frequency, each ship station shall:

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[1] The headquarters of District Commandants concerned are located at Boston, New York, Philadelphia, Norfolk; Charleston, South Carolina; San Diego, San Francisco, Seattle; Pearl Harbor, Territory of Hawaii; and Balboa, Canal Zone. In addition to having senior naval officers stationed at these places, the Navy has officers performing various duties at practically all other important United States ports.

(1) Within the scope of its normal operations and without discrimination, acknowledge all calls directed to it, and receive from stations operating in the maritime mobile service, all messages and communications which are addressed to the ship or to any person or persons on board and which are for termination on such ship.

(2) At the request of any station operating in the maritime mobile service, a ship station may, within the scope of its normal operation accept messages or communications as requested for retransmission to any other station in the maritime mobile service. Whenever such messages or communications have been received and acknowledged by a ship station for this purpose, it shall be incumbent upon that station to retransmit the message as directed, with the least delay possible.

(b) The master of every ship, equipped with licensed radio transmitting apparatus capable of providing communication with other ships or with a coast station, on meeting with a direct danger to the navigation of other ships such as dangerous ice, a dangerous derelict, a tropical storm, or any other direct danger to navigation, shall cause to be transmitted, insofar as is possible, all pertinent information relating thereto, to ships in the vicinity and to the appropriate authorities provided that such procedure, in the discretion of the master, will not be a repetition of action already taken for this purpose by another station.

§ 8.304 *Service requirements for public ship stations.* In addition to such messages as are necessary for compliance with § 8.303, and except as may be otherwise limited by the terms of this part governing the use of particular frequencies or by the terms of the station license, a public ship station within the scope of its normal service, without discrimination and upon reasonable demand, shall provide a service of public correspondence for any person who, while on board in any status or capacity, requests the service covering any subject matter that legally may be transmitted by radio: *Provided, however,* That, unless specifically authorized by the Commission in individual cases in advance, this service shall not be authorized to be provided when the ship carrying the station is out of service as a ship.

§ 8.305 *Service of limited ship stations and marine utility stations.* In addition to such messages as are necessary for compliance with § 8.303 and except as may be otherwise limited by the terms of this part governing the use of particular frequencies or by the terms of the station license, a limited ship station or a marine utility station is authorized to transmit within the scope of its normal operations messages necessary for the safe, expeditious or economical operation of ships or (when necessary) for the safety of aircraft.

SUBPART N—USE OF RADIOTELEGRAPHY

§ 8.321 *Assignable frequencies.* (a) Each of the specific frequencies in kilocycles hereinafter designated in this paragraph may be authorized as an assigned frequency for use by ship stations (public or limited) employing telegraphy by means of amplitude modulation in accordance with the provisions of paragraph (b) of this section and Subpart E of this part.

143
calling
152
153
154
155
156
157
158
160
[1]355
[1]375
[1]394
[1]400
[1]410
425
[1]444
454
468
[1]480
500
calling
and
distress

[1]2,274
[1]3,030
4,140
calling
4,150
[1]4,160
[1]4,165
5,510
5,512.5
5,515
5,520
calling
5,525
5,527.5
5,530
5,535
[1]6,210
calling
6,220
6,230
8,240
8,250
8,260
8,280

calling
8,300
8,320
8,330
11,020
11,025
11,030
11,040
calling
11,050
11,055
11,060
11,070
12,360
12,375
12,390
12,420
calling
12,440
12,450
12,460
12,480
16,480
16,500

16,520
16,530
16,560
calling
16,575
16,590
16,600
16,605
16,640
16,660
22,025
22,040
22,050
22,060
22,075
22,080
calling
22,100
22,110
22,120
22,125
22,140

Except as may be otherwise specified herein or in the particular station license, the radio channels of which the above frequencies are the assigned frequencies may be employed for communication with ship stations or coast stations: *Provided, however,* That if the assigned frequency is above 5000 kc, the radio channel thereof is authorized primarily for communication with coast stations.

(b) (1) The frequencies 355 kc and 444 kc are assignable exclusively for communication with United States Government stations; their use for any other communication (except distress) is not authorized. The radio-channel of which 444 kc is the assigned frequency shall, whenever practicable, be used for this purpose: *Provided,* That harmful interference shall not be caused to the service of any coast station. Effective when ordered by the Commission relative to implementation of certain international agreements, use by ship stations of the radio-channel of which 355 kc is the assigned frequency shall be discontinued.

(2) In addition to the transmission of specific signals for purposes of radiolocation, the radio-channel of which 375 kc is the assigned frequency may be used for communication by radiotelegraphy with direction-finding stations in connection with established international operating procedure, relative to radiolocation by means of direction-finding. Effective when ordered by the Commission relative to implementation of certain international agreements, the frequency 410 kc shall be assignable for this purpose in Region 2 in lieu of 375 kc: *Provided,* That in Regions 1 and 3, ship stations may transmit, for purposes of direction-finding, on the radio-channel of which 410 kc (in lieu of 375 kc) is the assigned frequency, if directed to do so by a coast station or direction-finding station located in either of those Regions.

(3) Any radio-channel, of which 394, 400, 410, 4165, or 6210 kc is the assigned frequency, shall not be used on the Great Lakes or on the inland waters of the United States.

(4) The radio-channel of which 480 kc is the assigned frequency is authorized for use only in European coastal regions in accordance with paragraph (b) of § 8.324.

(5) The frequency 2274 kc is assignable for use only on the Great Lakes or on inland waters of the continental United States, on condition that interference is not caused to the service of any station of Canada.

(6) The frequency 3030 kc is assignable for use only on the Mississippi River and tributaries thereof, on condition that interference is not caused to the service of any station of Canada.

§ 8.322 *Frequencies for use in distress.* (a) The international distress frequency is 500 kc; it is used as an assigned frequency for this purpose by ship or aircraft stations, using frequencies in the band 365 to 515 kc, when requesting assistance from the maritime services. It is used, preferably with class A2 emission, for the distress call and distress traffic.

(b) The frequency 8280 kc is designated as the assigned frequency for the use of survival craft equipped to transmit on frequencies within the band 4,000 kc to 23,000 kc and desiring to establish, with stations of the maritime mobile service, communications relating to search and rescue. Effective when ordered by the Commission, this frequency will be replaced by the frequency 8364 kc.

§ 8.323 *Frequencies for calling.* (a) The general international calling frequency is 500 kc; the radio-channel of which this frequency is the assigned frequency shall be used by any ship station engaged in radiotelegraphy in the authorized bands between 365 and 515 kc, and by aircraft desiring to enter into communication with a station of the maritime mobile service using frequencies in this band. The radio-channel for replying to a call sent on the general calling channel (500 kc assigned frequency) is the same channel as that used for the call. In Region 2, and in other areas of heavy radiotelegraph traffic in this band, ship stations shall request coast stations to answer by means of their normal working channel. In order to facilitate the reception of distress calls, all stations using the radio-channel of which 500 kc is the assigned frequency shall reduce to the minimum their transmissions on this channel.

(b) The frequency 143 kc is the international calling frequency in the maritime mobile service in the band 100 to 160 kc (class A1 emission only). The frequency for replying to a call sent on the frequency 143 kc is, for ship stations, 143 kc, the same as that of the call.[2]

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[1] Subject to the special conditions and limitations set forth in paragraph (b) of this section.

[2] Coast Stations reply on their normal working frequency in this band.

When a ship station which uses frequencies within the band 100 to 160 kc desires to establish communication with another station of the maritime mobile service, it shall call that station on the frequency 143 kc, unless the International List of Coast and Ship Stations provides otherwise. This frequency shall be used exclusively for individual calls and replies to such calls and for the transmission of signals preparatory to traffic.

(c) The radio-channels of which the frequencies between 4,000 kc and 23,000 kc, designated for "calling" in paragraph (a) of § 8.321, are the assigned frequencies shall be used primarily for calling and answering; with the exception of 8280 kc they may be used otherwise on a secondary basis only as provided by paragraph (e) of § 8.324.

(d) In addition to the radio-channels of which the assigned frequencies are specifically authorized herein for "calling", all radio-channels within the band 4,000 kc to 23,000 kc similarly authorized for working may be used for calling also: *Provided*, Interference is not caused to any communication in progress on the particular working channel.

§ 8.324 *Frequencies for working.* (a) Each assigned frequency listed in paragraph (a) of § 8.321, and which is not identified therein with a specific use or function, is authorized as an assigned frequency for "working."

(b) Ship telegraph stations working on frequencies within the band 390 to 485 kc shall use, whenever practicable, an authorized working channel of which 425, or 468 kc is the assigned frequency: *Provided*, That in the European coastal regions where message traffic is congested, ship stations when using class A-2 emission in this band shall use, if practicable, an authorized working channel of which either 425 kc or 480 kc is the assigned frequency.

(c) The calling channel of which 500 kc is the assigned frequency may be used for the transmission of distress, urgency, and safety messages; except for the applicable provisions of §§ 8.402 and 8.403 relative to radiolocation, any other use of this channel for working is prohibited.

(d) In so far as is practicable, ship stations shall use frequency-assignments within the high frequency band (3,000 to 23,000 kc) only when other frequency-assignments will not provide effective communication.

(e) In addition to the radio-channels of which the assigned frequencies are designated by paragraph (a) of this section for "working", the radio-channels within the band 4,000 kc to 23,000 kc (except 8,280 kc) of which the assigned frequencies are designated in paragraph (a) of § 8.321 for "calling" may be used, additionally and with discretion, for working; on condition that interference shall not result to calling, answering, and the exchange of operating signals on the same channel.

(f) In addition to the frequency-assignment designated for telegraphy in the license of a ship station, such station, when working by telegraphy with a coast station, may, on condition that its emission-bandwidth and frequency-tolerance shall be within the respective limits thereof permitted for the coast station, transmit—

(1) On a telegraph working channel of a coast station within the band 110 to 194 kilocycles when directed to do so by the coast station for which the channel is authorized: *Provided*, Interference is not caused to the service of any land, fixed, broadcast, or radiolocation station: *And provided*, That the emission shall be class A1 only.

(2) On a telegraph working channel of a coast station within the bands 385 to 485 kc and 4,000 kc to 23,000 kc when directed to do so by the coast station for which the channel is authorized.

(g) In addition to the frequency-assignment designated for telegraphy in the license of a ship station, such station when working by telegraphy with a mobile or coast station of the United States Government may, on condition that its emission-bandwidth and frequency tolerance shall be within the respective limits thereof permitted for the Government station, transmit on a United States Government radio-channel when authorized or directed to do so by the Government station responsible, or by the Government department for which the radio-channel is authorized. The ship station assigned frequency, the class of emission, and the class of traffic on this frequency shall be designated by the Government station: *Provided*, That on frequencies below 160 kilocycles the emission shall be A1 only.

§ 8.325 *Use of Morse code required.* The signal code employed for telegraphy by stations in the maritime mobile service shall be the Morse code signals specified in the Telegraph Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947). However, for radiotelegraph communication of a special character, the use of other signals may be specifically authorized by the Commission in response to an appropriate application therefor.

§ 8.326 *Identification of stations.* (a) All radiotelegraph emissions of a ship station shall be clearly identified by transmission therefrom of the official call letters assigned to that station for telegraphy by the Commission. These call letters shall be transmitted by telegraphy in accordance with § 8.325 and the procedure set forth in the International Radio Regulations and by means of the class of emission normally used by the station for telegraphy: *Provided*, They shall be transmitted always upon completion of any transmission when the station resumes its watch or suspends transmission for an indefinite time; in addition they shall be transmitted at intervals not exceeding 15 minutes whenever transmission is sustained for a period exceeding 15 minutes.

§ 8.327 *Procedure in testing.* (a) Ship stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelegraph testing procedure described below shall be followed.

(1) The licensed radiotelegraph operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The operator shall transmit the the signal "IE" (two dots, space, one dot) on the test frequency as a warning that test emissions are about to be made on that frequency. When the frequency or frequencies of the test emissions is/are within the frequency band 365–515 kc, a listening watch shall be maintained on 500 kc by a licensed radiotelegraph operator at the station throughout the test period.

(3) If, as a result of transmitting the test signal "IE", any station indicates, by transmitting the signal "AS" (wait), that it anticipates harmful interference, testing shall be suspended. When transmission of "IE" is resumed and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in (4);

(4) Test signals composed of a series of "VVV" followed by the call sign of the testing station shall be transmitted. The call sign shall be sent clearly and at relatively slow speed.

(b) When testing is conducted on the frequency 500 kc, the test signals shall not continue for more than 10 seconds, and no tests shall be conducted during the 500 kc silent periods. Care must be exercised not to so prolong and space the dash portion of the "VVV" series as to form the alarm signal.

§ 8.328 *Radiotelegraph operating procedure.* (a) Except for the transmission of distress or urgency signals, all transmissions from stations on board ship must cease within the band 480 to 520 kc during each 500 kilocycles silent period, i. e., for three minutes twice an hour beginning at x h 15 and x h 45, Greenwich mean time (G. M. T.).

(b) In order to facilitate radiotelegraph communication in the maritime mobile service, all ship stations transmitting by means of telegraphy shall, whenever practicable, use the service abbreviations ("Q" signals) listed in Appendix 9 of the International Radio Regulations (Atlantic City, 1947).

(c) In addition to compliance with all applicable sections of this part, the operation of ship stations using telegraphy for call, reply, and the transmission of message traffic shall, in particular, comply with all applicable provisions of Articles 29 (except subparagraph (2) of paragraph 8 thereof), 30, 31, 32, 38, 39, and 40 of the International Radio Regulations (Atlantic City, 1947).

§ 8.329 *Station documents.* (a) All ship stations on board ships compulsorily fitted with a radiotelegraph installation shall be provided with the following documents:

(1) A valid station license.

(2) The necessary operator license or licenses.

(3) The station log required by this part for stations of this category.

(4) The Alphabetical List of Call Signs prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(5) The List of Coast Stations and Ship Stations prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(6) The List of Stations performing Special Services prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(7) The General Radiocommunication Regulations (Revision of Cairo, 1938), and such provisions of the International Telecommunication Convention (Madrid, 1932) as are necessary for the operation of the radiocommunication service on board ship.

(8) Such provisions of the International Radio Regulations (Atlantic City, 1947), including Articles 23, 24, 25, 26, 29, 30, 31, 32, 35, 37, 38, 39, 40, 41, 44, and 45, as are necessary for the operation of the radiocommunication and radiolocation service on board ship.

(9) Telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams.

(10) Part 8 of the rules of the Commission.

(b) All ship stations on board ships not compulsorily fitted with a radiotelegraph installation, but using telegraphy, shall be provided with the documents prescribed by subparagraphs (1), (2), (3), (4), (5), and (10) of paragraph (a) of this section.

(c) These documents shall be continuously and readily available to the licensed operator on duty during the hours of service of the station.

§ 8.330 *Station records.* (a) Each ship station authorized to use telegraphy on frequencies within the band 100 to 515 kc shall maintain an accurate radiotelegraph log as follows:

(1) Each sheet of the log shall be numbered in sequence, for each voyage, and shall include the name of the vessel, official call letters of the ship station and the name of the operator on watch.

(2) The entry "on watch" shall be made by the operator beginning a watch, followed by his signature. The entry "off watch" shall be made by the operator being relieved or terminating a watch, followed by his signature. All log entries shall be currently completed at the end of each watch by the operator responsible for the entries. The use of initials or signs is not authorized in lieu of the operator's signature.

(3) During the period a watch is maintained by an operator, all calls transmitted to or from the ship station and all replies transmitted or received shall be entered, stating the time and frequencies, and the call letters of the station communicated with or heard. (If desired, the names of the stations or ships also may be entered.) In addition, a notation of any messages exchanged shall be entered stating the time, the frequency in kilocycles, and the call letters of the station(s) heard, or communicated with. (If desired, the names of the stations or ships also may be entered.) In so far as possible, a positive entry with respect to reception on 500 kilocycles shall be made at least once in each 15 minutes. The entries required by paragraph (e) of this section shall be acceptable as positive entries provided operating conditions are such as to prevent additional entries being made.

(4) The date and time of making an entry shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (GMT), except that in the Great Lakes region the time shall be expressed in eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock, beginning at midnight).[3] The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "GMT" (e. s. t. in the Great Lakes region) shall be marked at the head of the column in which the time is entered.

(5) During the period a watch is maintained by an operator, an entry shall be made twice per hour stating whether or not the international silent period was observed. In addition, entries shall be made indicating any signals or communications heard on 500 kilocycles during this period. If no signals are heard on 500 kilocycles, an entry to that effect shall be made. The use of rubber stamps for making entries to show observation of the silent period is not authorized.

(6) All distress calls, automatic alarm signals, urgent and safety signals made or intercepted, the complete text, if possible, of distress messages and distress communications, and any incidents or occurrences which may appear to be of importance to safety of life or property at sea, shall be entered, together with the time of such observation or occurrence, and the position of the ship or other mobile unit in need of assistance, if it can be determined.

(7) Whenever harmful interference is experienced, an entry shall be made to that effect, stating the source of the interference, if known.

(8) The approximate geographical location of the ship, preferably the noon position, shall be entered each day of each voyage, either in terms of latitude and longitude, or as the distance in nautical miles and the direction from a known fixed point. For this purpose, the master of the ship shall furnish this information to the radio operator. The position report so furnished shall correspond to any entry of the same position made in other official records of the ship.

(9) An entry shall be made of the time of departure and arrival of the vessel at each port, including in each entry the name of the port.

(10) A daily entry shall be made regarding comparison of the radio station clock with standard time, including an indication of any errors observed and corrections made. For this purpose, authentic radio time signals received from land or fixed stations shall be acceptable as standard time.

(11) All test transmissions shall be entered, together with the time of such transmissions and the approximate geographical location of the vessel, without regard to whether two-way communication with any other station is established.

(12) Any failure of equipment to operate as required, any failure of power supply, any inability to obtain sufficient power to charge storage batteries or to properly operate the radio installation and any incidents tending to unduly delay communications shall be entered.

(b) In addition to the radio log requirements stipulated in paragraph (a) of this section, the radio log of each ship station authorized to use telegraphy on frequencies within the band 100 to 515 kc, shall, when the ship is required by law and regulations to keep a radiotelegraph watch on 500 kc for safety purposes by means of a qualified operator, comply also with the following provisions:

(1) Entries shall be made of the results of tests of the emergency installation including transmitter antenna current, hydrometer readings of lead-acid storage batteries, voltage readings of other types of batteries, and quantity of fuel available for engine generators.

(2) An entry shall be made each time the emergency power supply is used (when the vessel is in the open sea) to carry on communication (other than a watch for safety purposes), stating the approximate period of time of such use.

(3) Results of inspections and tests of lifeboat radio equipment, when installed in compliance with requirements of law, prior to departure of the vessel from a harbor or port and the results of weekly inspections of such lifeboat equipment shall be entered.

(4) On a cargo vessel equipped with an auto-alarm, the entry "auto-alarm on", "sensitivity set at (The actual setting of the sensitivity control at the time the auto-alarm is placed in operation should be designated)", and the entry "auto-alarm off", respectively, shall be made whenever the operator places the auto-alarm in and out of operation. Results of the required auto-alarm tests shall be entered daily, including the sensitivity-control setting and the minimum number of 4-second dashes from the testing device which were necessary to properly operate the alarm.

(5) On a cargo vessel equipped with an auto-alarm, an entry shall be made in the radio station log whenever the visual indicator installed on the bridge (to indicate when the alarm becomes inoperative due to prolonged atmospherics or other interference), remains actuated for a continuous period of 5 minutes. A statement shall be included giving particulars as to the time the operator was called to make the necessary repairs or adjustments; any reason for the failure; the names of any parts removed, added, or substituted; repairs effected; and the time the alarm was restored to proper operating conditions.

(6) On a cargo vessel equipped with an auto-alarm, an entry shall be made in the radio station log whenever the auto-alarm becomes inoperative due to causes not indicated by the audible warning or the visual indicator, or

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[3] For example, 8:01 p. m. eastern standard time should be entered as 0101 GMT; 8:30 a. m. eastern standard time should be entered as 1330 GMT; 7:45 p. m. eastern standard time should be entered as 0045 GMT.

whenever the audible warning is actuated. The entry shall include a statement showing the time the operator was called to make any necessary repairs or adjustments; the reason for the audible alarm being actuated or failing to be actuated, any parts removed, added, or substituted; repairs effected; and the time the auto-alarm was restored to proper operating condition.

(c) Each ship station authorized to use telegraphy, on frequencies above 550 kc exclusively (except ship stations on the Great Lakes and on board vessels navigated solely on inland waters of the United States), shall maintain an accurate radiotelegraph log as prescribed in paragraph (a) of this section: *Provided*, That (3) and (5) of section (a) shall, in this case, not be applicable.

(d) Each ship station on the Great Lakes and on board a vessel navigated solely on inland waters of the United States which is authorized to use telegraphy, on frequencies above 550 kilocycles exclusively, shall maintain an accurate radiotelegraph log as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include the name of the vessel, official call letters of the ship station and the signature of the licensed operator in attendance at the time communication is effected.

(2) An entry shall be made for each complete exchange of communications with any station, stating the approximate geographical location of the vessel, the call letters or the name of the station communicated with, the time of the communication, the nature of the messages or signals exchanged, and designation of the transmitting frequencies.

(3) All test transmissions shall be entered, including designation of the transmitting frequency, together with the time of commencement and completion of such transmissions and the approximate geographical location of the vessel, without regard to whether two-way communication with any other station is established.

(4) All distress calls, urgent and safety signals made or intercepted; the complete text, if possible, of distress messages and distress communication; and any incidents or occurrences which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation of concurrence, designation of the frequency on which such transmissions were received, and the position of the ship or other mobile unit in need of assistance, if it can be determined.

(5) Any failure of equipment to operate as required, any failure of power supply, any inability to obtain power to charge storage batteries or to properly operate the radio installation and any incidents tending to unduly delay communication shall be entered.

(6) The date and time of making an entry shall be shown opposite the entry and the time shall be expressed as follows:

For vessels navigated on the Great Lakes:

Eastern standard time (e. s. t.) (counted from 00:00 to 24:00 o'clock beginning at midnight.[4] The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "e. s. t." shall be marked at the head of the column in which the time is entered.

For vessels navigated on inland waters of the United States, other than the Great Lakes:

Local standard time (e. s. t., c. s. t., etc.) (counted from 00:00 to 24:00 o'clock, beginning at midnight).[4] The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "e. s. t." or "c. s. t.", etc., shall be marked at the head of the column in which the time is entered. However, this provision shall not prohibit the use of time entries expressed in GMT (and so indicated) in lieu of local standard time.

(e) In all ship stations authorized to transmit on frequencies with the band 365 to 515 kilocycles, a written record shall be maintained of the adjustments of the transmitting and receiving equipment for operation on the assigned frequencies 375 kc and 500 kc and at least one authorized working frequency within this band. This record shall be posted at all times in a conspicuous place on or near the particular equipment involved.

(f) The ship radiotelegraph log currently in use shall be kept by the licensed operator(s) of the station and while in use it shall be located in the main radiotelegraph operating room of the ship. At the conclusion of each voyage terminating at a port of the United States, the original station log or a duplicate thereof dating from the last departure of the ship from a United States port shall be retained under proper custody on board the ship for a sufficient period of time but not necessarily in excess of 24 hours, to be available for inspection by a duly authorized representative(s) of the Commission. Thereafter the original log, and the duplicate log, if provided, may be filed at an established shore office of the ship station licensee, and shall be retained as stipulated by § 8.115.

SUBPART O—USE OF RADIOTELEPHONY

§ 8.351 *Assignable frequencies.* (a) Each of the specific frequencies in kilocycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations employing telephony by means of amplitude modulation subject to and in accordance with the provisions of paragraph (d) of this section, other applicable sections of this subpart, and Subpart E of this part:

2,003
2.110
2,118
2,126
2,134
2,142
2,158
2,166
2,174
2,182
2,198
2,206
2,214
2,638
2,738
2,782
4.162.5
4,402.5
4,412.5
4,422.5
4,457.5
6,240
6,455
6,650
6,660
6,670
8,810
8,820
8,830
8,840
8,850
11,090
13,200
13,210
13,220
13,230
13,245
13,260
13,275
17,600
17,610
17,620
17,640
17,660
17,680
23,000

(b) Each of the specific frequencies in megacycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations or marine-utility stations on board ship employing telephony by means of either amplitude modulation or frequency modulation subject to and in accordance with the provisions of other applicable sections of this subpart, and Subpart E of this part:

35.06 35.10 35.14 35.18 43.02

(c) Each of the specific frequencies in megacycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by ship stations and/or marine-utility stations as respectively designated herein which employ telephony by means of frequency modulation in Region 2 or by means of either frequency modulation or amplitude modulation in Regions 1 and 3, subject to and in accordance with the provisions of other applicable sections of this subpart and Subpart E of this part:

(1) Available for ship stations and marine-utility stations;

156.3
156.4
156.5
156.6
156.8
157.0

(2) Available for ship stations only;

157.1 157.4

(d) Assignment of the specific carrier frequencies designated in paragraph (a) of this section and use of frequency-assignments of which those frequencies are the authorized carrier frequencies shall be subject to the express limitations and conditions hereinafter set forth in this paragraph:

(1) The frequency 2003 kc is authorized for use by ship stations on the Great Lakes only. Availability of this frequency for this use is temporary, in the sense that its assignment as prescribed in this subpart shall be subject to cancellation or modification by the Commission without the necessity of a hearing if in the discretion of the Commission such action is necessary or desirable in connection with implementation of the Table of Frequency Allocations set forth in Article 5 of the Radio Regulations, Atlantic City, 1947. The use of this frequency is shared with ship stations of other countries in the Great Lakes area for the purposes hereinafter prescribed in this subpart.

(2) The frequencies 2134, 2142, 2166, and 2206 kc are authorized for use upon the express condition that interference shall not be caused to the service of any station of Canada: *Provided*, That in the Great Lakes area, the frequency 2206 kc may be used for communication exclusively with coast stations in Canada.

(3) The frequencies 2118 kc and 2158 kc are authorized for use on a shared basis with stations of Canada: *Provided*, That in the Great Lakes area, the frequency 2158 kc shall be used for communication exclusively with coast stations in the United States.

(4) The frequency 2182 kc is the radiotelephone calling and distress frequency for the maritime mobile service of the United States. This frequency is authorized for use on a shared basis with stations of other countries and without

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[4] For example, 7:01 p. m. eastern standard time would be entered as 1901 e. s. t.; 7:30 a. m. eastern standard time would be entered as 0730 e. s. t.; 6:45 p. m. eastern standard time would be entered as 1845 e. s. t.

distinction as to location or area of use: *Provided, however,* That its use for purposes other than distress shall not cause interference to stations of the maritime mobile service within 300 nautical miles of Charleston, South Carolina, Jacksonville, Florida, or Wilmington, California, or within 500 nautical miles of Vancouver, British Columbia, which, for a temporary period, continue in accordance with their respective station authorizations to use this frequency, or other frequencies within the band 2170 kc to 2194 kc, inclusive, for working.

(5) The frequency 2214 kc is authorized for use exclusively at locations at which interference is not caused to the service of any United States Government Station.

(6) Subsequent to the effective date of this subparagraph, the frequency 2638 kc is assignable exclusively to ship stations on board ocean-going vessels, and on board other vessels (without distinction as to their area of navigation) which are compulsorily fitted with a radiotelephone installation for purposes of safety. The use of this frequency is on a shared basis with ship stations of other countries, for the purpose hereinafter prescribed in this subpart.

(7) The frequency 2738 kc is not authorized for use on the Great Lakes. It is authorized for use in all other areas on a shared basis with ship stations of other countries, for the purpose hereinafter prescribed in this subpart.

(8) The frequency 2782 kc is authorized for use exclusively on the Mississippi River and connecting inland waters (except the Great Lakes); such use of this frequency is subject to coordination with stations operating in the fixed service at other locations in the United States, in order that interference shall be avoided or reduced to a minimum.

(9) The frequency 4162.5 kc is authorized for use exclusively on the Mississippi River and connecting inland waters (except the Great Lakes); such use of this frequency is authorized upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused.

(10) On the Great Lakes, the frequencies 4422.5, 6660, and 8820 kc are authorized upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused.

(11) The frequencies 6,240, 6,455 kc, and 11,090 kc are authorized for use exclusively on the Mississippi River and connecting inland waters (except the Great Lakes) upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused. In order to avoid such interference, transmission on these frequencies during the period from two hours after local sunset until two hours before local sunrise is prohibited.

(12) On the Mississippi River and connecting inland waters (except the Great Lakes), use of the frequency 8840 kc is authorized upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused. In order to avoid such interference, transmission on this frequency in this area during the period from two hours after local sunset until two hours before local sunrise is prohibited.

(13) Use of the frequencies 8810 kc and 8850 kc is subject to coordination with stations operating in the fixed service in order that interference shall be avoided or reduced to a minimum.

(e) Specific frequencies other than those listed in paragraphs (a), (b) and (c) of this section must be requested as set forth in § 8.30 and may not be assigned except in accordance with applicable international agreement and subsequent to appropriate rule making procedures.

§ 8.352 *Frequencies for use in distress.* (a) Subject to the provisions of paragraph (b) of this section, the radiotelephone distress frequency for the maritime mobile service of the United States is 2182 kc[1] it may be used as a carrier frequency for this purpose by ship or aircraft stations employing telephony in the band 1605 kc to 2850 kc when requesting assistance from the maritime services. It may be used, preferably with class A3 emission, for the distress call and distress traffic.

(b) Until such time as the frequency 2182 kc becomes guarded effectively for distress calls in United States areas other than the Great Lakes region,[2] ship stations using telephony in event of distress only may call stations of the United States Coast Guard on the Government frequency 2670 kc. Transmission on the Government frequency 2670 kc for any purpose other than distress is strictly forbidden. In the Great Lakes region, the distress frequency 2182 kc is to be used at all times for radiotelephone distress calls and traffic.

§ 8.353 *Frequencies for calling.* (a) The general radiotelephone calling frequency for the maritime mobile service of the United States is 2182 kc; it may be used as a carrier frequency for this purpose by ship stations and aircraft stations operating in the maritime mobile service subject to the following conditions and limitations:

(1) Aside from distress calls and distress traffic, this frequency may be used for urgency and safety signals and for urgency and safety messages (other than public correspondence);

(2) In addition, this frequency is authorized only for call and reply, and for signals preparatory to working on other frequencies;

(3) When using this frequency for other than distress calls and distress traffic, and urgency and safety signals and messages, the mean[3] antenna power of the unmodulated carrier wave shall not exceed 100 watts.

(4) The use of this frequency for other than distress calls and distress traffic, and urgency and safety signals and messages within 300 nautical miles of Charleston, South Carolina, Jacksonville, Fla., or Wilmington, California, or within 600 miles of Vancouver, British Columbia, shall not cause interference to stations of the maritime mobile service which, for a temporary period, continue in accordance with their current respective station authorizations to use this frequency, or other frequencies within the band 2170 kc to 2194 kc inclusive, for working.

(b) The radiotelephone frequency for call and reply for the maritime mobile service of the United States using frequencies within the band 156.25 mc to 162.05 mc is 156.8 mc. It may be used as a carrier frequency for this purpose by these stations for call and reply, and by ship stations additionally as prescribed in paragraph (c) of § 8.359.

(c) In addition to the radio-channels of which the carrier frequencies are specifically authorized herein for "calling", the radio-channels authorized in this subpart for "working" may be used for call and reply also: *Provided,* Interference is not caused to any communication in progress on the particular working channel.

§ 8.354 *Frequencies below 5000 kc for public correspondence.* (a) Carrier frequencies which are authorized for use by public ship stations employing telephony by means of amplitude modulation for the transmission of public correspondence exclusively are designated herewith; ship stations shall use the radio-channels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations (normally providing direct connection with public service land-line telephone systems) located at, or in the vicinity of, the specific harbors, ports or places designated hereinafter opposite the respective ship transmitting frequency, and shall receive transmission from the particular coast stations on the associated receiving frequencies also designated herewith:

(1) Frequencies available for use when different radio-channels are used

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[1] The frequency 2182 kc will be formally recognized as the international radiotelephone distress and calling frequency in Region 2 not later than the date on which Article 3 of the Inter-American Radio Agreement, Washington, 1949, becomes effective, and in Regions 1, 2, and 3 (world-wide) not later than the date on which the new International Frequency List becomes effective as provided by Article 47 of the International Radio Regulations, Atlantic City, 1947.

[2] In the Great Lakes region, the frequency 2182 kc has been in use as the general radiotelephone calling frequency for several years, and its use in time of distress in that area has proven effective.

[3] As prescribed by paragraph 2, Article 3, of the Inter-American Radio Agreement, Washington, 1949. Article 1, paragraph 63 of the International Radio Regulations, Atlantic City, 1947, states as follows: "Mean power of a radio transmitter: The power supplied to the antenna during normal operation, averaged over a time sufficiently long compared to the period corresponding to the lowest frequency encountered in actual modulation." (In general, a time of one-tenth second, during which the meanpower is a maximum, will be selected.)

alternately for transmission by the ship station and the coast station:

Ship station transmitting carrier frequency [1]	Coast station(s) located in vicinity of—	Ship station receiving carrier frequency
2110 kc	Boston, Mass.	2506 kc.
	San Francisco, Calif.	
	Eureka, Calif.	
2118 kc	Miami, Fla.	2514 kc.
	Great Lakes (U. S. and Canada).	
2126 kc	Seattle, Wash.	2522 kc.
	New York, N. Y.	
2134 kc	Galveston, Tex.	2530 kc.
	Hawaiian Islands	
	San Juan, P. R.	
2142 kc	Norfolk, Va.	2538 kc.
	Quantico, Va.[2]	
2158 kc	Tampa, Fla.	2550 kc.
	Great Lakes (U. S. only)	
2166 kc	Wilmington, Del.	2558 kc.
	New York, N. Y.[3]	
2174 kc	Charleston, S. C.	2566 kc.
	Jacksonville, Fla.[4]	
	Los Angeles, Calif.	
2198 kc	New York, N. Y.	2590 kc.
	Hawaiian Islands	2582 kc.
2206 kc	New Orleans, La.	2598 kc.
	Astoria, Oreg.	
	Portland, Oreg.[5]	
	Great Lakes (Canada only).	2582 kc.
4402.5 kc	Miami, Fla.	4287.5 kc.
	Hawaiian Islands	4177.5 kc.
4412.5 kc	New York, N. Y.	4177.5 kc.
	Boston, Mass.[6]	
4422.5 kc	San Francisco, Calif.	4280 kc.
	Great Lakes	4282.5 kc.
	Los Angeles, Calif.[7]	4280 kc.
4457.5 kc	New York, N. Y.	4752.5 kc.

[1] These frequencies are those which may be specified in applications for ship station authorizations.

[2] On these channels, Quantico shares circuit-time with Norfolk.

[3] On these channels, New York shares circuit-time with Wilmington.

[4] On these channels, Jacksonville shares circuit-time with Charleston.

[5] On these channels, Portland shares circuit-time with Astoria.

[6] On these channels, Boston shares circuit time with New York.

[7] On these channels, Los Angeles shares circuit-time with San Francisco.

(2) Frequencies available for use by ship stations on board vessels while navigated on the Mississippi River and connecting inland waters (other than the Great Lakes); exclusively for communication with coast stations located in the vicinity of any harbor, port, or place on the Mississippi River and connecting inland waters (other than the Great Lakes), when the ship station and the coast station transmit alternately on the same radio-channel:

2782 kc [4] 4162.5 kc [4]

(b) The use of the working frequencies authorized in subsection (a) of this section is subject to the applicable conditions and limitations set forth in paragraph (d) of § 8.351. Further, and insofar as practicable, ship stations shall use frequency assignments within the band 4000 kc to 5000 kc only when frequency assignments below 4000 kc or above 30 Mc will not provide effective communication.

§ 8.355 *Frequencies from 5000 kc to 30 Mc for public correspondence.* (a) Carrier frequencies within the band 5000 kc to 30 Mc which are authorized for use by public ship station employing telephony by means of amplitude modulation for the transmission of public correspondence exclusively are designated herewith; ship stations shall use the radio-channels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations (normally providing direct connection with public service landline telephone systems):

(1) Frequencies authorized for use by ship stations on board ocean-going vessels primarily for long distance communication, when the ship station and the coast station transmit alternately on different radio-channels; except as expressly provided otherwise in this subpart, these frequencies shall not be used by ship stations on the Great Lakes or inland waters of the continental United States:

6,650 kc
6,660 kc
6,670 kc
8,810 kc
8,820 kc
8,830 kc
8,840 kc
8,850 kc
13,200 kc
13,210 kc
13,220 kc
13,230 kc
13,245 kc
13,260 kc
13,275 kc
17,600 kc
17,610 kc
17,620 kc
17,640 kc
17,660 kc
17,680 kc
23,000 kc

(2) Frequencies authorized for use by ship stations on board vessels while navigated on the Great Lakes; exclusively for communication with coast stations in the Great Lakes area, when the ship station and the coast station transmit alternately on different radio-channels. Ship stations shall receive transmission from the particular coast stations on the associated receiving frequencies also designated herewith:

Ship station transmitting carrier frequency [5]	*Ship station receiving carrier frequency*
6660 kc	6470 kc
8820 kc	8585 kc

(3) Frequencies authorized for use by ship stations on board vessels while navigated on the Mississippi River and connecting inland waters (other than the Great Lakes); exclusively for communication with coast stations located in the vicinity of any harbor, port, or place on the Mississippi River and connecting inland waters (other than the Great Lakes), when the ship station and the coast station transmit alternately on the same radio-channel:

6240 kc [5] 6455 kc [5]
2840 kc [5] 11090 kc [5]

(b) The use of the working frequencies authorized in paragraph (a) of this section is subject to the applicable conditions and limitations set forth in paragraph (d) of § 8.351. Further, insofar as is practicable, ship stations shall use frequency assignments within the band 5000 kc to 30 Mc only when frequency assignments below 5,000 kc or above 30 Mc will not provide effective communication.

§ 8.356 *Frequencies above 30 Mc for public correspondence.* (a) Carrier frequencies above 156 Mc which are authorized for use by public ship stations emmodulation (or in Regions 1 and 3, amplitude modulation when required) for the transmission of public correspondence exclusively, are designated herewith; ship stations shall use the radio-channels of which these frequencies are the authorized carrier frequencies exclusively for working with public coast stations (normally providing direct connection with public service land-line telephone systems):

(1) For ship station transmission to public coast stations when the same radio-channel is used for transmission by the coast station:

157.1 Mc and 157.4 Mc

(2) For transmission to public coast stations except coast stations within 75 statute miles of Chicago, Illinois, when a different radio-channel is used for transmission by the coast station:

For ship station transmission [6]	*For ship station reception* [6]
157.4 Mc	161.9 Mc

(3) For transmission to public coast stations including coast stations at Chicago, Illinois, and locations within 75 statute miles thereof, when a different radio-channel is used for transmisison by the coast station:

For ship station transmission	*For ship station reception*
157.1 Mc	162 Mc

(4) For transmission to public coast stations at Chicago, Illinois, and locations within 75 statute miles thereof, when a different radio-channel is used for transmission by the coast station:

For ship station transmission	*For ship station reception*
157.4 Mc	156.4 Mc

(b) (1) Carrier frequencies within the band 30 Mc to 40 Mc which, subject to and in accordance with the conditions and limitations hereinafter set forth in this subsection, are authorized for use by public ship stations employing telephony by means of either frequency modulation or amplitude modulation for transmission and reception of public correspondence exclusively on the same radio-channel only when communicating with public coast stations licensed to transmit on such frequencies prior to the effective date of this subsection and located within the vicinity of the respective harbor(s), port(s), or place(s) designated herein opposite the particular carrier frequency:

Carrier frequency:	*For communication only with coast stations within the vicinity of—*
35.14 Mc	Philadelphia, Pa.
35.18 Mc	Great Lakes region.

(2) Each of these carrier frequencies is available for use on a shared basis with limited coast stations, limited ship stations, marine-utility stations and aircraft stations operating in the maritime mobile service at any location on the same radio channel; they are not available exclusively for public correspondence. Licensees having authority to transmit on these frequencies shall cooperate in the use thereof in order to minimize interference.

(3) Applicants for public ship station licenses or renewal or modification of such licenses whose applications request authority to transmit on 35.14 Mc or

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[4] These frequencies are those which may be designated in applications for ship station authorizations.

[5] These frequencies are those which may be designated in applications for ship station authorizations.

[6] In accordance with arrangements between the United States and certain foreign countries.

35.18 Mc for the purpose of communicating with public coast stations as specifically set forth in this section, may be required, in the discretion of the Commission, to show a need for the use of such frequencies for public correspondence in lieu of the specific frequencies above 156 Mc authorized in this subpart for public correspondence exclusively.

(4) Ship stations (except stations operating under appropriate licenses granted prior to the effective date of this paragraph) shall not use the carrier frequencies 35.14 Mc or 35.18 Mc for public correspondence unless such stations are specifically authorized to do so by the terms of the respective ship station license. Notwithstanding the provisions of Subpart M of this part, ship stations shall not be classified as public ship stations because of their authority to transmit on 35.14 Mc and/or 35.18 Mc, unless they are specifically authorized by the terms of their station licenses to use these carrier frequencies for public correspondence as prescribed in this section.

§ 8.357 *Additional frequencies for public correspondence.* In addition to the frequency assignment designated for public correspondence by means of telephony in the license of a public ship station, such station, when working by telephony with a foreign coast station for this purpose may, on condition that interference shall not be caused to the service of any station which in the discretion of the Commission may have priority on the involved radio channel(s), transmit to such coast station when directed to do so by that station on a specific frequency assignment designated by the coast station for the service being carried on.

§ 8.358 *Frequencies below 3000 kc for safety purposes.* (a) Carrier frequencies which are authorized for working between ship stations (ship-to-ship) employing telephony for transmission and reception on the same radio-channel by means of amplitude modulation, primarily for the transmission of safety communication,[1] are designated herewith:

2003 kc (Great Lakes area only).
2638 kc (as designated in subsection (d)).
2738 kc (other than Great Lakes area).

The use of these carrier frequencies for public correspondence is prohibited. Further, their use by ship stations is subject to the conditions and limitations set forth in the following subsections of this section.

(b) The frequency 2003 kc is the general working frequency for ship to ship telephony in the Great Lakes area exclusively, primarily for safety communication under conditions requiring the use of a frequency in this portion of the spectrum. This frequency, even though licensed, is not to be used by ship stations which are licensed also to use frequencies above 30 Mc for ship to ship telephony, under conditions when the use of a licensed frequency above 30 Mc in lieu of 2003 kc would provide effective safety communication.

(c) The frequency 2738 kc is the general working frequency for ship to ship telephony (except in the Great Lakes area), primarily for safety communication under conditions requiring the use of a frequency in this portion of the spectrum. This frequency, even though licensed, is not to be used by ship stations which are licensed also to use frequencies above 30 Mc for ship to ship telephony, under conditions when the use of a licensed frequency above 30 Mc in lieu of 2738 kc would provide effective safety communication.

(d) The frequency 2638 kc is the primary working frequency for ship to ship telephony for safety communication between ships at sea and between ships in any area which are compulsorily fitted with a radiotelephone installation for safety purposes. This frequency is assignable only to ship stations on board ocean-going vessels and ship stations on board vessels compulsorily fitted with a radiotelephone installation for safety purposes. Even though licensed for this purpose, it is not to be used by ship stations which are licensed also to use frequencies above 30 Mc for ship to ship telephony, under conditions when the use of a licensed frequency above 30 Mc in lieu of 2638 kc would provide effective safety communications.

§ 8.359 *Frequencies above 156 Mc for safety purposes.* (a) Carrier frequencies which are authorized for use by ship stations and by marine-utility stations on board ship, employing telephony for transmission and reception on the same radio-channel by means of frequency-modulation (or by means of amplitude modulation in Regions 1 and 3 when required) primarily for the transmission of safety communication, are designated herewith:

156.8 Mc: for calling and safety; available for any ship station or marine-utility station on board ship in any area.

156.3 Mc: for intership (ship-to-ship) communication exclusively; available for any ship station or marine-utility station board ship in any area.

157.0 Mc: for intership (ship-to-ship) communication exclusively; for this purpose available only for ship stations and marine-utility stations on board commercial transport vessels,[2] for use exclusively on the Great Lakes, the Mississippi River and tributaries, and the Gulf of Mexico Intra-Coastal Waterway.

The use of these carrier frequencies for public correspondence (except as may be required for communication with foreign coast stations) is prohibited. Further, their use by ship stations is subject to the conditions and limitations set forth in the following paragraphs of this section.

(b) The carrier frequency 157.0 Mc is assignable only to ship stations and marine-utility stations on board commercial transport vessels when such stations are capable also of transmitting and receiving on the intership radio-channel of which 156.3 Mc is the authorized carrier frequency, and are authorized to communicate on that radio-channel. One application, however, may be submitted for ship station license for initial authority to transmit on each of these two radio-channels. The requirement of this subsection shall not apply to a marine-utility station on board ship when the ship station on board the same vessel complies therewith.

(c) (1) The radio channel of which 156.8 Mc is the authorized carrier frequency is designated primarily for calling and safety purposes in ship-to-ship and ship-shore communication. It may be used when appropriate by ship stations and marine-utility stations on board ship employing telephony for short-distance communication as an alternative to the radiotelephone distress frequency 2182 kc, for distress calls and distress traffic, and for safety communication.

(2) In accordance with the provisions of subparagraph (1) of this paragraph, this radio-channel may be used by ship stations and marine-utility stations on board ship for:

(i) Call, reply, and the exchange of brief operating signals; and

(ii) Operating signals preparatory to message traffic on a different radio-channel; and

(iii) The transmission from ship to ship of brief messages within the category of safety communication.

(3) The use of this radio-channel by ship stations, or marine-utility stations on board ship, for transmission not strictly in accordance with subparagraphs (1) and (2) of this paragraph is prohibited unless the stations engaged in communication are in the open sea and more than 150 nautical miles from the nearest land. Under the latter circumstances, this radio-channel may be used for ship-to-ship communication of any nature necessary for the safe, expeditious or economical operation of ships.

(d) The radio-channel of which 156.3 Mc is the authorized carrier frequency is designated for intership (ship-to-ship) communication exclusively. When a ship station or a marine-utility station on board ship is authorized to transmit on one radio-channel only (within the frequency-band 156.25 Mc to 157.45 Mc) exclusively for intership communication, the authorized carrier frequency of such intership radio-channel shall, in all cases, be 156.3 Mc: *Provided*, This condition shall not apply to a marine-utility station on board ship when the ship station on board the same vessel is authorized to transmit on the assigned frequency 156.3 Mc. This radio-channel may be used:

(1) Primarily for safety communication and the exchange of signals and messages of direct benefit to marine navigation;

(2) Secondarily, and with discretion, for other communication concerning the safe, expeditious or economical operation of ships.

(e) The radio-channel of which 157.0 Mc is the authorized carrier frequency is designated, with respect to its use by ship stations and marine-utility stations on board ship on the Great Lakes, Mississippi River and tributaries, and the Gulf of Mexico Intra-coastal Waterway, exclusively for intership communications. Its use for intership communication is authorized for stations on board commercial transport vessels only. For intership communication, this radio-channel may be used:

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[1] The term "safety communication" is defined in paragraph (a) of § 8.6.

[2] See paragraph (o) of § 8.2 which defines "commercial transport vessel."

(1) Primarily for safety communication and the exchange of signals and messages of direct benefit to marine navigation;

(2) Secondarily, and with discretion, for other communication concerning the safe, expeditious or economical operation of ships.

§ 8.360 *Frequencies above 156 Mc for business and operational purposes.* (a) Carrier frequencies which are authorized for use exclusively by ship stations and marine-utility stations on board commercial transport vessels, employing telephony by means of frequency-modulation (or amplitude modulation in Regions 1 and 3 when required) for transmission and reception on the same radio channel, are designated herewith; these carrier frequencies are authorized primarily for communication with limited coast stations and marine-utility stations on shore, and secondarily with ship stations and marine-utility stations on board ship:

156.4 Mc (except at Chicago, Ill., and locations within 225 statute miles thereof).

156.5 Mc: all areas.

156.6 Mc: all areas[*] (limited to harbor or port operational traffic).

157.0 Mc: not available for ship-shore communication on the Great Lakes, the Mississippi River or any tributary thereof, the Gulf of Mexico Intra-coastal Waterway, nor any location within 100 statute miles of any portion of these waters.

The use of these carrier frequencies for public correspondence (except as may be required for communication with foreign coast stations) is prohibited. Further, their use by ship stations is subject to the conditions and limitations set forth in the following paragraphs of this section.

(b) Each of the radio-channels of which the frequencies designated in paragraph (a) of this section are the authorized carrier frequencies is available on a shared basis only to serve the business and operational needs of commercial transport vessels and they shall not be construed as available for the exclusive use of any one station licensee or any specific ship or ships. All licensees saving authority to transmit on such assigned frequencies shall cooperate in the use thereof in order to minimize interference and obtain the most effective use of the authorized facilities.

(c) The carrier frequency 156.4 Mc is authorized for use as designated herewith:

Geographic area	*Type of commercial transport vessel*
Other than Great Lakes, Mississippi River and tributaries, and Gulf Intra-coastal Waterway.	Vessels navigated primarily within harbor or port areas, including tugs, towboats, pilot boats, barges, wreckers, dredges, local ferries, repair ships, and harbor craft of municipalities or States.
Great Lakes, except within 225 statute miles of Chicago, Ill.	Ferries navigated primarily between separate harbors or ports, and commercial fishing vessels.
Mississippi River and tributaries and Gulf Intra-coastal Waterway, except within 225 statute miles of Chicago, Ill.	Vessels of such class or classes as may be required by prevailing needs of various port areas.

(d) The carrier frequency 156.5 Mc is authorized for use as designated herewith:

Georgraphic area	*Type of commercial transport vessel*
Other than Great Lakes__________________	Vessels navigated primarily between separate harbors or ports, and commercial fishing vessels.
Great Lakes, except within 225 statute miles of Chicago, Ill.	Vessels (except ferries and commercial fishing vessels) navigated primarily between separate harbors or ports.
Great Lakes, within 225 statute miles of Chicago, Ill.	Vessels (including ferries) navigated primarily between separate harbors or ports, and commercial fishing vessels.

(e) The carrier frequency 156.6 Mc is authorized for use within, or within the vicinity of, all harbor or port areas primarily for communication concerning port operations; in such areas it may be used additionally, on a secondary basis, to serve other business and operational needs of ships upon the express condition that such secondary use shall not interfere with nor delay the exchange of port operational message traffic.

(f) Except as otherwise provided in this subsection and in paragraph (a) of this section, the carrier frequency 157.0 Mc is authorized for such use as may be required from time to time to serve prevailing business and operational needs of commercial transport vessels: *Provided*, That in order to avoid interference in certain geographic areas to the use of an exclusive intership radio-channel of which 157.0 Mc is the authorized carrier frequency, the use of this carrier frequency for ship-shore communication is prohibited (except for distress purposes) on the Great Lakes, the Mississippi River and tributaries, the Gulf of Mexico Intra-coastal Waterway, and at any location within 100 statute miles of any portion of those waters.

(g) All communication on any radio-channel of which 156.4 Mc, 156.5 Mc, 156.6 Mc, or 157.0 Mc is the authorized carrier frequency shall be limited solely to safety communication and communication necessary for the operational and business needs of ships; in particular communication of a personal nature not relative to safety or the operational or business needs of ships is strictly forbidden: *Provided, however*, That the radio-channel of which 156.4 Mc is the authorized carrier frequency may be used for the reception of public correspondence, from public coast stations transmitting on this channel which are located at Chicago, Illinois, or within 75 statute miles thereof, pursuant to the provisions of paragraph (a) (4) of § 8.356. Whenever these radio-channels are used on a secondary basis for ship-to-ship communication, such use shall not willfully interfere with nor delay any communication between ship and shore.

(h) Notwithstanding any of the provisions of this section, any radio-channel of which 156.4 Mc, 156.5 Mc, 156.6 Mc, or 157.0 Mc is the authorized carrier frequency may be used for ship-to-ship communication of any nature necessary for the safe, expeditious or economical operation of ships when the stations engaged in communication are in the open sea and more than 150 nautical miles from the nearest land.

§ 8.361 *Frequencies within the band 30 to 50 Mc for general communication.* (a) Carrier frequencies which are authorized for any communication necessary for the safe, expeditious or economical operation of ships (other than public correspondence) for use by ship stations and marine-utility stations on board ship employing either frequency-modulation or amplitude modulation for telephony, for transmission and reception on the same radio-channel are designated herewith:

Carrier frequency:	*Normal geographic area of use*
85.06 Mc	Gulf-Caribbean area north of 15° north latitude (includes Puerto Rico and Virgin Islands—does not include Florida east coast area).
85.10 Mc	Pacific area within Region 2 and north of 15° north latitude.
35.14 Mc	Atlantic area within Region 2 and north of 15° north latitude (includes Florida east coast area).
85.18 Mc	Mid-continent area (includes Great Lakes).

Each of these assignable frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee. All licensees having authority to transmit on such assigned frequencies shall cooperate in the use thereof in order to minimize interference and obtain the most effective use of the authorized facilities.

(b) Each application which requests assignment of a carrier frequency designated in paragraph (a) of this section shall designate normally the carrier frequency specified in that paragraph for use in the geographic area in which the station is to be operated. Normally, only that carrier frequency is assignable for use in that area. When any other of these carrier frequencies is requested for assignment in a specified area, the application therefor shall include a satisfactory showing that the carrier frequency designated in paragraph (a) for use in the particular area will not meet the need of the proposed or existing service. When, in the opinion of the applicant, the location of the involved station is not, or will not be, clearly within one of the geographic areas designated in paragraph (a), the applicant shall obtain the necessary information in this respect by corresponding directly with the Commission at Washington, D. C.

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[*] In accordance with arrangements between the United States and certain foreign countries.

(c) Each of these carrier frequencies is assignable for communication (other than public correspondence) by means of telephony with limited coast stations, ship stations, and marine-utility stations on ship or shore, which for this purpose transmit on the same radio-channel. In addition, when required to serve a maritime purpose, each of these carrier frequencies is assignable in accordance with the geographic areas specified in paragraph (a) of this section for use by mobile stations on board aircraft at sea for communication by telephony with ship stations, limited coast stations, and marine-utility stations on board ship, when each of the involved stations transmit and receive on the same radio-channel; subject to this provision, ship stations and marine-utility stations are authorized to communicate additionally on such radio-channel(s) with mobile stations on board aircraft appropriately licensed for this purpose. Such stations on board aircraft shall be governed in the use of any of these frequency assignments by the same rules and regulations that apply to ship stations using the same frequency assignment.

(d) Any ship station licensed prior to March 1, 1949, for the use of telephony on the radio-channel of which 43.02 Mc is the authorized carrier frequency, may continue to be licensed for use of this radio-channel for communication only with limited coast stations and with ship stations using this same radio-channel for that purpose. The class of emission, authorized frequency-band, type of modulation, and maximum power as licensed prior to March 1, 1949, continues to be authorized for such licensed stations, upon the condition that the carrier frequency shall be maintained within 0.01 per cent of the authorized carrier frequency 43.02 Mc and that interference shall not be caused to any station in any other service.

(e) In addition to the provisions of paragraph (d) of this section, the carrier frequency 43.02 Mc may be authorized for use by ship stations employing telephony by means of either amplitude modulation or frequency modulation for ship to ship communication exclusively at locations or in areas (primarily outside the continental United States) where, as the result of transmission by ship stations on the radio-channel of which this frequency is the authorized carrier frequency, interference is not caused to any other service operating on the same or adjacent radio-channels.

§ 8.362 *Frequencies below 3000 kc for business and operational purposes.* (a) In addition to availability of the carrier frequency 2738 kc primarily for intership communication as prescribed in § 8.358, this frequency may, in response to proper application therefor, be specifically authorized in ship station licenses or specifically by order of the Commission for use (except in the Great Lakes area) to a limited extent in communicating by telephony (amplitude modulation) with such limited coast stations as are designated in the respective ship station license or in any applicable order of the Commission: *Provided:*

(1) The applicant makes a showing satisfactory to the Commission that exceptional and limited use of this carrier frequency for ship-shore communication, in lieu of a different frequency normally authorized for ship-shore communication (public correspondence or otherwise) is necessary to serve an important business or operational need of the vessel on which the ship station is located (other than public correspondence) and that the desired communication will be effective even though ship-to-ship communication for safety and other purposes has priority in the use of this frequency; and

(2) Harmful interference will not be caused to the service of ship-to-ship communication on the radio-channel of which 2738 kc is the authorized carrier frequency; and

(3) The plate input power to be used will be the minimum amount necessary to provide effective ship-shore communication on this radio-channel and will not at any time exceed the average plate-input power generally used by ship stations for intership communication on this radio-channel; and

(4) The ship-shore communication on this radio-channel shall be limited exclusively to that which is necessary to serve an important business or operational need of the vessel on which the ship station is located (excluding public correspondence);

(5) The use of this carrier frequency in accordance with any station authorization granted pursuant to this section shall be on a shared basis with any other station using this same frequency in accordance with a similar station authorization.

(b) The carrier frequency 2214 kc may, in response to proper application therefor, be specifically authorized in the license of a ship station for use, subject to the applicable limitation set forth in paragraph (d) of § 8.351, in communicating by telephony (amplitude modulation) with such limited coast station(s) and with such ship stations (when they use this same carrier frequency for transmission) as are designated in the particular ship station license: *Provided:*

(1) The applicant makes a showing satisfactory to the Commission that use of this carrier frequency, in lieu of a frequency above 30 Mc normally authorized for use by ship stations, is necessary to serve an important business or operational need of the vessel on which the station is located (other than public correspondence); and

(2) The communication carried on by the ship station on the radio-channel of which 2214 kc is the authorized carrier frequency shall be limited exclusively to that which is necessary to serve an important business or operational need of the vessel on which the ship station is located (excluding public correspondence); and

(3) The use of this carrier frequency in accordance with any station authorization granted pursuant to this section shall be on a shared basis with any other station using this same frequency in accordance with a similar station authorization.

§ 8.363 *Use of U. S. Government frequencies for telephony.* In addition to use of the frequency assignment designated for telephony in the license of a ship station, such station when communicating by telephony with a mobile or coast station of the United States Government may transmit on a Government frequency assignment when authorized or directed to do so by the Government station responsible or by the Government department or agency for which use of such frequency assignment is authorized; on condition that the emission bandwidth and frequency tolerance of the ship station shall be within the respective limits thereof required to be maintained by the Government station. Under these circumstances, the ship station carrier frequency, the class of emission, and the permissible class of traffic shall be designated and controlled by the responsible Government station, department, or agency.

§ 8.364 *Identification of station.* (a) All radiotelephone emissions of a ship station or a marine-utility station on board ship shall be clearly identified by transmission therefrom in the English language of the official call sign assigned to that station by the Commission: *Provided,* That, in lieu of identification of the station by voice, the official call sign may be clearly transmitted by tone-modulated telegraphy in the International Morse Code either by a duly licensed radiotelegraph operator or by means of an automatic device approved for this purpose by the Commission. This identification shall be made—

(1) At the beginning and upon completion of each communication with any other station;

(2) At the beginning and upon conclusion of each transmission made for any other purpose; and

(3) At intervals not exceeding 15 minutes whenever transmission is sustained for a period exceeding 15 minutes.

(b) When an official call sign is not assigned by the Commission to a ship station using telephony, the complete name of the ship on which the station is located and the name of the licensee shall be transmitted by voice in the English language for the purpose of station identification.

(c) The provisions of paragraphs (a) and (b) of this section shall apply also to ship stations of portable nature when using telephony and operated on board ship pursuant to §§ 8.40 and 8.71.

§ 8.365 *Procedure in testing.* (a) Ship stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelephone testing procedure described below shall be followed:

(1) The licensed radio operator or other person responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The official call sign of the testing station, followed by the word "test", shall be announced on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in subparagraph (2) of this paragraph any station transmits by voice the word "wait", testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph;

(4) The operator shall repeat the word "test" followed by the count "1, 2, 3, 4, * * * etc.", which in turn shall be followed by voice announcement of the official call sign of the testing station, the name of the ship on which the station is located, and the general location of the ship at the time the test is being made.

(b) When radiotelephone testing is conducted on the assigned frequency 500 kc or 8280 kc (from lifeboat stations specially authorized), or on the assigned frequency 2182 kc or 156.8 Mc, the test transmissions shall not continue for more than 10 seconds. Lifeboat stations using telephony shall not be tested on the assigned frequency 500 kc during the 500 kc silent periods.

§ 8.366 *General radiotelephone operating procedure*—(a) *Limitations on calling.* (1) Except when transmitting a general call to all stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a ship station shall call the particular station with which it intends to communicate.

(2) Calling a particular station, either by voice or by automatic means, shall not continue for a period of more than thirty seconds in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of five minutes.

(b) *Use of calling frequency required.*[10] (1) Before transmitting on the intership radio-channel of which 2003 kc is the authorized carrier frequency, ship stations in the Great Lakes area, shall first establish communication with each other by initially calling and answering on the calling channel of which 2182 kc is the authorized carrier frequency.

(2) Before transmitting on the intership radio-channel of which either 2638 kc or 2738 kc is the authorized carrier frequency, ship stations shall first establish communication with each other by initially calling and answering on the calling channel of which 2182 kc is the authorized carrier frequency; *Provided,* That this requirement shall be effective on and after January 1, 1954.

(3) Except when other operating procedure is established by and between the stations concerned, and except for marine-utility stations or stations of a portable nature which are not capable of a plate input power in excess of three watts and are not capable of being readily adjusted for operation on more than one radio-channel, the radio-channel of which 156.8 Mc is the authorized carrier frequency shall be used for call and reply by all ship stations and marine-utility stations on board ship preparatory to establishing ship-to-ship communication on the radio-channel of which the authorized carrier frequency is either 156.3 Mc or 157.0 Mc: *Provided,* That this requirement shall be effective on and after January 1, 1952.

(c) *Calling coast stations.* (1) Use of the carrier frequency 2182 kc by ship stations for calling coast stations, and for replying to calls from such stations is authorized; however, such calls and replies shall, in general, be made on a ship-shore radio-channel authorized primarily for working.

(2) Use of the carrier frequency 156.8 Mc by ship stations and marine-utility stations on board ship for calling coast stations and marine-utility stations on shore, and for replying to calls from such stations is authorized; however, such calls and replies shall, in general, be made on a ship-shore radio-channel authorized primarily for working.

(d) *Time limitation on calling frequency.* Transmission by ship stations on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed 3 minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(e) *Change to working frequency.* After establishing communication with another station by call and reply on the calling channel of which 2182 kc or 156.8 Mc is the authorized carrier frequency, stations on board ship shall change to an authorized working channel for the transmission of messages which, under the provisions of this subpart, cannot be transmitted on the respective calling channels.

(f) *Shared use of 2003, 2638 and 2738 kc.* (1) In regions of heavy radio traffic, any one exchange of communications between any two ship stations on the radio-channel of which 2003, 2638, or 2738 kc is the authorized carrier frequency, or between a ship and a limited coastal station on the 2738 kc channel, shall not exceed 5 minutes in duration after the two stations have established contact by calling and answering. Subsequent to such exchange of communications, the 2003, 2638 or 2738 kc channel shall not again be used for communication between the same two stations until 5 minutes have elapsed: *Provided,* That this requirement shall in no way limit or delay the transmission of distress or emergency communications.

(2) All transmission on the radio-channels of which 2638 kc and 2738 kc are the authorized carrier frequencies by two or more stations, engaged in any one exchange of signals or communications with each other, shall take place on only one of these channels. For this purpose, the stations involved shall transmit and receive on the same channel: *Provided,* That this requirement is waived in the event of emergency when by reason of interference or limitation of equipment this method of single-channel communication cannot be used.

(g) *Authorized use of 2003, 2638, and 2738 kc.* (1) The radio-channels of which 2003 kc, 2638 kc, or 2738 kc are the authorized carrier frequencies, shall be used by ship stations for safety communication and for communication necessary for and relating directly to maritime operations. Other classes of communication, such as those of a purely personal or social nature which do not concern safety or a maritime purpose, are strictly forbidden.

(2) Ship stations licensed to transmit on the radio-channel of which 2638 kc is the authorized carrier frequency, shall, when on inland waters of the United States, restrict the use of this channel to a necessary minimum.

(h) *Time limitation on public correspondence.* Any one exchange of public correspondence between a public ship station and a public coast station shall not exceed ten minutes in duration. Subsequent to any one exchange of public correspondence of ten minutes or less, the same working channel shall not again be used by the same ship station until five minutes have elapsed: *Provided,* That this limitation shall not apply in event of distress or other emergency.

(i) *Limitation on business and operational traffic.* All ship-to-ship communication and communication with limited coast stations and marine-utility stations on shore engaged in by ship stations and marine-utility stations on board ship shall be limited, on radio-channels above 30 Mc, to the minimum practicable transmission time. In the conduct of ship-shore communication (other than distress), stations on board ship shall comply with instructions given by the limited coast station or marine-utility station on shore, with which they are communicating, in all matters relative to operating practices and procedures and to the suspension of transmission in order to minimize interference.

(j) *Limitation on 6660 kc and 8820 kc on Great Lakes.* Ship stations in the Great Lakes area, authorized to use the carrier frequency 6660 kc or 8820 kc pursuant to § 8.351 (d) (10), shall during the periods from local sunset to local sunrise, not transmit on these frequencies whenever the necessary communication can be effected on authorized frequencies below 5000 kc or above 30 Mc.

§ 8.367 *Station documents.* (a) Ship stations using telephony, but not authorized to employ telegraphy except for calling purposes incidental to the use of telephony, shall be provided with the documents hereinafter specified:

(1) Ship stations on board vessels engaged on international voyages other

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[10] See §§ 8.106, 8.353, 8.358, and 8.359.

than those voyages designated in subparagraph (2) of this paragraph:

(i) A valid station license.

(ii) The necessary operator license or licenses.

(iii) The station log required by this part for stations of this category.

(iv) The Alphabetical List of Call Signs prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(v) The List of Coast Stations and Ship Stations prescribed in Article 15 of the General Radio Regulations (Revision of Cairo, 1938).

(vi) Part 8 of the rules of the Commission.

(2) Ship stations on board vessels not navigated on international voyages or engaged on international voyages solely on inland waters of the United States and Canada, including the Great Lakes; the documents listed in items (i), (ii), (iii), and (vi) of subparagraph (1) of this paragraph.

§ 8.368 *Station records.* (a) Ship stations using telephony shall maintain an accurate radiotelephone log during their hours of service, as hereinafter specified:

(1) The radiotelephone log of each ship station on board a vessel engaged on an international voyage other than a voyage of the category designated in subparagraph (2) of this paragraph shall be maintained as follows:

(i) Each sheet of the log shall be numbered in sequence for each voyage, and shall include, the name of the vessel, official call sign of the ship station, and the name and signature of the licensed operator on board who is responsible for operation of the radiotelephone transmitting apparatus. (The use of initials or signs in lieu of the operator's signature is not authorized.)

(ii) With respect to ship stations which, by reason of the provisions of § 8.223, are required to maintain a watch on the radio-channel designated for radiotelephone calling and distress (assigned frequency 2182 kc), entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering and exchanging operating signals and safety communications on this radio-channel, or for any brief exchange of communication on an intership radio-channel. These entries shall be made by a licensed operator or by a member of the crew who is designated and authorized by the master to do so; the name and signature of the person(s) making these entries and the person(s) who actually maintain such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(iii) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. In addition, the ship's own position and the distance from the distressed ship or other mobile unit, if obtainable, shall be entered. These entries shall be made by a licensed operator or by a member of the crew who is designated and authorized by the master to do so; the name and signature of the person(s) making these entries shall appear in the log and shall be properly related to each particular entry of this category.

(iv) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(v) The approximate geographical location of the ship, preferably the noon position, shall be entered each day of each voyage, either in terms of latitude and longitude, or as the distance in nautical miles and the direction from a known fixed point. For this purpose, the master of the ship shall furnish this information either to the responsible operator or to a licensed deck officer who shall make this entry together with related entry of his name and signature.

(vi) An entry shall be made, in the same manner as for item (v) of this subparagraph, of the time of departure and arrival of the vessel at each port, including in each entry the name of the particular port.

(vii) A daily entry shall be made, in the same manner as for item (v) of this subparagraph, regarding comparison of the radio station clock or other timepiece with standard time, including an indication of any errors observed and correction made. For this purpose, authentic radio time signals received from land or fixed stations shall be acceptable as standard time.

(viii) All test transmissions shall be entered, together with the time of such transmissions and the approximate geographical location of the vessel, without regard to whether two-way communication with any other station is established. These entries shall be made by the licensed operator responsible for operation of the radio-telephone transmitting apparatus and his name and signature shall be entered in relation thereto.

(ix) An entry shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(x) The date and time of making each entry shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (GMT) as follows. The first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation "GMT" shall be marked at the head of the column in which time is entered.

(2) The radiotelephone log of each ship station on board a vessel not navigated on an international voyage, or engaged on an international voyage solely on inland waters of the United States and Canada, shall be maintained as follows:

(i) Each sheet of the log shall be numbered in sequence for each voyage made in the open sea; for other voyages or for navigation not within the meaning of a voyage, each log sheet shall be numbered in sequence during the period covered by each calendar month.

(ii) Each sheet of the log shall include the name of the vessel, official call sign of the ship station, and the name and signature of the licensed operator (or other person in accordance with § 8.155) who is responsible for operation of the radiotelephone transmitting apparatus. (The use of initials or signs in lieu of signatures is not authorized.)

(iii) The log shall contain all entries stipulated in items (ii), (iii), (iv), (vii), (viii) and (ix) of subparagraph (1) of this paragraph; such entries shall be made in the manner prescribed in each such item, provided that with respect to item (viii), the required entries may be made by the person responsible for operation of the station, in lieu of a licensed operator, in accordance with the provisions of § 8.155.

(iv) With respect to each ship station on board a vessel navigated in the open sea, the log shall contain all entries stipulated in items (v) and (vi) of subparagraph (1) of this paragraph; such entries shall be made in the manner prescribed in each such item.

(v) With respect to each ship station on board a vessel not navigated in the open sea, the geographic area in which the vessel is navigated or is temporarily moored, or the route being followed by the vessel, expressed in a general way, shall be entered in the log each day the vessel is in service. This entry shall be made by the responsible operator or by a member of the crew designated by the master to do so. The person who makes this entry shall enter his name and signature in relation thereto.

(b) Marine utility stations on board ship shall maintain an accurate radiotelephone log during their hours of service as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include the name and geographic area of navigation of the vessel upon which the station is operated; the date and time of operation of the station; official call sign of the marine utility station, the name and signature of the licensed operator (or other person in accordance with § 8.155) who is responsible for operation of the marine utility station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed

the work, and unless he is regularly employed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

SUBPART P—USE OF RADIOLOCATION

§ 8.401 *Assignable frequencies for direction-finding.* (a) The frequency 375 kc is the assigned frequency in Region 2 for direction-finding exclusively. Effective when ordered by the Commission this frequency shall be replaced, with respect to stations of the United States, by the frequency 410 kc. In Regions 1 and 3, the frequency 410 kc may be used in those areas where the use of this frequency (in lieu of 375 kc) for direction-finding is the prevailing procedure.

(b) As an exception, on condition that signals of distress, urgency and safety, and calls and answers, are not interfered with, the calling channel of which 500 kc is the assigned frequency may be used additionally and with discretion, by ship stations for direction-finding; exclusively in Regions 1 and 3 outside areas of heavy radio traffic.

(c) In the event of distress, the following frequencies may be used for radiolocation for purposes of search and rescue by any licensed station on board ship, without regard to whether or not these frequencies are designated in the station license:

375 kc
410 kc
500 kc
2182 kc
8280 kc

§ 8.402 *Use of direction-finding frequency.* Except in event of distress, transmission on the direction-finding frequency (375 kc or 410 kc as designated in § 8.401) is permissible only when authorized by the terms of the station license. The operating procedure used shall comply with that set forth in the International Radio Regulations applicable to the use of this frequency; the exchange of signals and communications on this frequency by means of radiotelegraphy which is a necessary adjunct to direction-finding, together with the actual process of direction-finding, constitutes a maritime radionavigation service.

§ 8.403 *Radiolocation by cable-repair ship.* Provided radio transmitting equipment attached to a cable-marker buoy has been adequately described in an application for ship radio station license for a cable-repair ship with which the buoy is associated, and provided further that such equipment is authorized in the related ship station license, that equipment may be operated for direction-finding on the frequency 278 kc (or such other comparable frequency as may be authorized by the Commission specifically for this purpose) under authority of the ship station license, with A-1 or A-2 emission and a maximum plate input power of 30 watts. The call signals that must be used for a transmitter operating under the provisions of this section shall be the regularly assigned call of the ship station with which the buoy is associated, to be followed by the letters "BT", and the identifying number of the buoy. The buoy transmitter shall be continuously monitored by a licensed radiotelegraph operator on board the associated cable-repair ship. Should a frequency deviation in excess of 0.5 percent or interference to the service of any other station be reported or observed, the radiation of the transmitter shall be suspended until the deviation is eliminated or until the transmitter can be operated without causing interference.

§ 8.404 *Assignable frequencies above 2400 Mc.* (a) The following frequency-bands are authorized for use by ship radionavigation stations (including ship radar stations) in the maritime radionavigation service;[1] the maximum power shall be designated in each instrument of authorization: *Provided*, That for stations other than ship radar stations,[2] the class of emission, the frequency tolerance, and the bandwidth occupied by the emission shall be designated in each instrument of authorization.

3000 Mc to 3246 Mc
5460 Mc to 5650 Mc
9320 Mc to 9500 Mc

(b) The following frequency-bands are authorized for use by ship radiolocation stations in the maritime radiolocation service; the class of emission, the frequency tolerance, the bandwidth occupied by the emission, and the maximum power shall be designated in each instrument of authorization:

(1) 2450 to 2500 Mc: For purposes other than radionavigation or safety, on the condition that harmful interference shall not be caused to the fixed and mobile services, on the condition that no protection shall be given from interference caused by emissions from industrial, scientific, or medical equipment.

(2) 3000 Mc to 3246 Mc, 5460 Mc to 5650 Mc, 9320 Mc to 9500 Mc: The use of frequencies within these bands for radiolocation, other than radionavigation, shall not cause harmful interference to the radionavigation service.

§ 8.405 *Special provisions applicable to ship radar stations.* (a) Every ship radar station licensed, prior to the effective date of this section, in the former "ship service" shall, subsequent to the effective date of this section, be regarded as licensed in the maritime radionavigation service[3] and the use and operation of such stations shall be governed accordingly.[4]

(b) Each ship radar station installation the manufacture of which was completed on or after 1947 shall be furnished with a durable name plate with the manufacturer's name, transmitter model number; and month and year of completion of manufacture permanently inscribed thereon. Such name plate shall be affixed to the indicator housing at the principal radar operating position or to some other component of the radar installation which is readily accessible for inspection.

(c) Each ship radar station license issued shall be subject to the condition that the station licensee, in relation to the proper operation of the station in accordance with the radio law, and rules and regulations of the Commission, will be represented on board the radar-equipped vessel by the person who at any given time occupies the position of master.

(d) Effective on and after January 2, 1951, the following provisions shall apply to ship radar stations:

(1) The station licensee of each ship radar station shall provide and require to be kept at the station a permanent installation and maintenance record. Entries in this record shall be made by or under the personal direction of the responsible installation, service, or maintenance operator concerned in each particular instance, but the station licensee shall have joint responsibility with the responsible operator concerned for the faithful and accurate making of such entries as are required by this paragraph.

(2) Each entry in this record shall be personally signed by the responsible operator concerned.

(3) The following entries shall be made in this record:

(i) The date and place of initial installation.

(ii) Any necessary steps taken to remedy any interference found to exist at the time of such installation.

(iii) The nature of any complaint (including interference to radio communication) arising subsequent to initial installation, and the date thereof.

(iv) The reason for the trouble leading to the complaint, including the name of any component or component part which failed or was misadjusted.

(v) Remedial measures taken, and the date thereof.

(vi) The name, license number, and date of the ship radar operator endorsement on the first or second class radio operator license of the responsible operator performing or immediately supervising the installation, servicing, or maintenance.

(e) Until the Commission shall otherwise provide, the ship radar station licensee, by such arrangement as may be necessary with the ship master, operating agency, or ship owner, shall, upon specific request made by the Commission, be responsible for the submission of such reports as are requested by the Commission to show the value and practical performance of the ship radar station. For assistance in preparing these reports, daily records, when the radar installation is tested or used, should, when practicable, be kept showing at least the following:

(1) Approximate number of hours of use while the ship is in operation;

(2) Number of service failures, and duration, nature, and cause of each failure if known;

(3) Performance under local weather conditions which are unfavorable for marine navigation; and

(4) Unusual incidents, including, among others, cases in which radar may have aided or hindered safe operation of the ship.

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[1] The associated transmitting frequencies of U. S. Government radar beacons (racons) are, respectively, as follows: 3256, 5450, and 9310 megacycles.

[2] With respect to ship radar stations, see §§ 8.131, 8.132, and 8.133.

[3] See paragraph (i) of § 8.4.

[4] See § 8.138 relative to type-approval of ship radar transmitters.

(f) In addition to the installation and maintenance record required by paragraphs (d) and (e) of this section, the following documents shall be available for reference on board each radar-equipped vessel whose ship radar station is licensed by the Commission:

(1) Part 8 of the Commission's rules.

(2) At least one set of instructions from the respective manufacturer relative to the use and operation of the particular type of ship radar installation.

(g) No provisions of this part shall require any ship radar station to transmit any signal(s) intended solely for the purpose of identifying that station.[8]

SUBPART Q—DEVELOPMENTAL STATIONS

§ 8.431 *Supplemental eligibility.* An authorization for developmental operation of a station on board ship in any of the services under this part will be issued only to those persons who are eligible to operate such stations on a regular basis.

§ 8.432 *Showing and statement required.* (a) Except as provided in paragraph (c) of this section, each application for authorization for a developmental station on board ship shall be accompanied by a showing that:

(1) The applicant has an organized plan of development leading to a specific objective,

(2) A point has been reached in the program where actual transmission by radio is essential to the further progress thereof,

(3) The program has reasonable promise of substantial contribution to the expansion or extension of the use of radio for a maritime purpose, or is in a field of maritime operation not already investigated,

(4) The program will be conducted by qualified personnel,

(5) The applicant is legally and financially qualified, and possesses adequate technical facilities for conduct of the program as proposed,

(6) The public interest, convenience, or necessity will be served by the proposed operation.

(b) Every application for authority to engage in developmental operation shall be accompanied by a statement signed by the applicant in which it is agreed that any authorization issued pursuant thereto will be accepted with the express understanding of the applicant that it is subject to change in any of its terms or to cancellation in its entirety at any time, upon reasonable notice but without a hearing, if, in the opinion of the Commission, circumstances should so require.

(c) The provisions of paragraph (a) of this section do not apply when an application is made for a developmental station solely for the reason that the frequency requested is restricted to such developmental use.

§ 8.433 *Assignable frequencies.* (a) Stations engaged in developmental operation may be authorized to use a frequency or frequencies, available for the service and class of station which they propose to operate. The number of frequencies assignable to a particular station shall depend upon the specific requirements of the developmental program and the number of frequencies available for such use in the particular area where the station is to be operated.

(b) In addition to the specific frequencies and frequency bands designated in this part as available for a particular service and class of station each of the following frequencies and frequency bands available for the maritime mobile service may be licensed as an assigned frequency or as an authorized frequency band, respectively, for use by developmental ship stations subject to the applicable provisions of this part:

156.7 Mc
156.9 Mc
3,500 Mc to 3,700 Mc
6,425 Mc to 6,575 Mc
11,700 Mc to 12,200 Mc
26,000 Mc to 30,000 Mc
and

16,000 Mc to 18,000 Mc, 2,450 Mc to 2,500 Mc on the condition that no protection shall be given from interference caused by emissions from industrial, scientific or medical equipment. The class of emission, the frequency tolerance, the emission bandwidth and the maximum transmitter power for use on frequencies within these bands above 2,400 Mc shall be designated in each station authorization.

§ 8.434 *Use of developmental stations.* (a) Developmental stations on board ship shall be constructed and used in such manner as to conform with all applicable technical and operating requirements[1] contained in this part, unless deviation therefrom is specifically provided in the station authorization.

(b) Communication with any station of a country other than the United States is prohibited unless specifically authorized by the terms of the station authorization.

(c) The operation of a developmental station is subject to the condition that harmful interference is not caused to the operation of stations licensed in an established service under any part of the Commission's rules.

§ 8.435 *Developmental program.* (a) The developmental program as described by the applicant in the application for authorization shall be substantially followed unless the Commission shall otherwise direct.

(b) Where some phases of the developmental program are not covered by the general rules of the Commission and the rules in this Part, the Commission may specify supplemental or additional requirements or conditions in each case as deemed necessary in the public interest, convenience or necessity.

(c) The Commission may, from time to time, require a station engaged in developmental work to conduct special tests which are reasonable and desirable to the authorized developmental program.

§ 8.436 *Report of operation required.* A report on the results of the developmental program shall be filed with and made a part of each application for renewal of authorization, or in cases where no renewal of authorization is requested, such report shall be filed within 60 days of the expiration of such authorization. Matters which the applicant does not wish to disclose publicly may be so labelled; they will be used solely for the Commission's information and will not be publicly disclosed without permission of the applicant. The report shall include comprehensive and detailed information on the following:

(a) The final objective of the developmental operation.

(b) Pertinent results of operation to date.

(c) Analysis of the results obtained.

(d) Copies of any published reports.

(e) Need for continuation of the program if such need exists.

(f) Number of hours of operation on each authorized frequency during the term of the license to the date of the report.

§ 8.437 *Identification of station.* (a) The radiotelegraph and radiotelephone emissions of a developmental station on board ship shall be clearly identified in the manner provided in §§ 8.326 and 8.364, respectively.

(b) The facsimile emissions of a developmental station on board ship shall be identified either by telegraphy or by telephony as provided in §§ 8.326 and 8.364, respectively.

(c) All other classes of emission of a developmental station on board ship shall be identified as prescribed in the respective station authorization.

SUBPART R—COMPULSORY SHIPBOARD RADIO INSTALLATIONS[1]

§ 8.501 *Inspection of installation.*[2] (a) In accordance with paragraph (a) of § 8.101 and pursuant to section 360 of the Communications Act, every ship of the United States subject to Part II of Title III of the Communications Act, shall have the equipment and apparatus prescribed therein, inspected at least once each year by the Commission. The issuance of an appropriate certificate[3] in behalf of any vessel of the United States concerning the radio particulars provided for in the Safety Convention is subject to a finding by the Commission that such vessel complies in an efficient manner with the applicable radio and communication provisions of that convention or that, pursuant to the provisions of Article 28 of that Convention, such vessel is exempt from those provisions of that Convention.

(b) In accordance with Article 54 of the Safety Convention, every ship of the United States holding a Safety Certificate, Safety Radiotelegraphy Certificate or Exemption Certificate is subject, when in a port of any foreign country which is a party to the Safety Convention to control by officers duly authorized by the government of that country, in so far as that control is directed towards verifying that there is on board a valid convention certificate, and if necessary, that the conditions of the vessel's seaworthiness correspond substantially with the particulars of that certificate; that is to say, so that the ship can proceed to sea without danger to the passengers and the crew.[4]

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[8] See § 8.74 in respect to call signs of ship radar stations.

[1] Such requirements are those applicable to the corresponding established class of station including provisions relating to operator requirements, station logs, station documents and assignment of call signs.

[1] With respect to required operators, watches, and use of auto-alarms, see Subparts F and H of this part.

[2] See §§ 8.46, 8.47, 8.48 and 8.49.

[3] See section 359 of the Communications Act.

§ 8.502 *Main and emergency installations.* (a) A radio installation on board a vessel subject to Title III, Part II of the Communications Act, to be construed as a main installation and a separate emergency or reserve installation, shall comply with the following conditions, in addition to all other requirements:

(1) A main radio transmitter and an associated main radio receiver shall be installed.

(2) A separate emergency radio transmitter and an associated separate emergency radio receiver shall be installed.

(3) Emergency electric lights shall be installed.

(4) An emergency power supply shall be installed.

(5) A main antenna and a separate emergency antenna shall be installed.

(b) Whenever a main installation only is provided on board a cargo vessel in accordance with the terms of subsection (a) of section 354 of the Communications Act, this installation shall comply in full with all rules and regulations of the Commission that apply to an emergency or reserve installation on board a vessel subject to Title III, Part II of the Communications Act.

§ 8.503 *Requirements of main installation.* (a) All main installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(1) The main antenna shall be as efficient as is practicable under the prevailing physical limitations and shall be adequately installed and protected so as to insure proper operation, and so as not to endanger the ship and the required radio installation. For the purpose of insuring adequate protection against failure of the main antenna installation when severe mechanical stress is suddenly applied, an approved "safety link"[5] shall be provided as a component of this installation.

(2) The main transmitter shall be of the electron-tube type[6] and shall be capable of meeting the requirements of § 8.552.

(3) The main receiver shall be capable of efficiently receiving radiotelegraph signals, classes A1 and A2 emission, on all frequencies within the bands 100 to 200 kilocycles and 350 to 515 kilocycles, and in addition class B emission within the band 485 to 515 kilocycles. In addition, it shall be fitted with a head receiver[7] capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive. Where a loudspeaker[7] is additionally provided for use in accordance with the provisions of § 8.204, such device also shall be capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive.

(4) There shall be readily available for use at all times under normal load conditions, when the vessel is leaving or attempting to leave a harbor or port for a voyage in the open sea, while being navigated in the open sea outside a harbor or port, and when required during inspection of the ship radio station by an authorized representative of the Commission, a main power supply for the main radio installation capable of supplying electrical power sufficient to energize simultaneously and efficiently the main transmitter at its required antenna power[8] and the main receiver; and at the same time to charge, at the required rate(s), all storage batteries used as the emergency power supply, and any other storage batteries which are charged by connection to this radio room main power supply. Under this load condition and at all times herein specified, the potential(s) of the main power supply at the radio room terminals shall not deviate from its rated electrical potential(s) by more than 10 percent on vessels completed on or after July 1, 1941, nor by more than 15 percent on vessels completed before that date.

(5) For the purpose of determining the potential(s) of the main power supply of the main transmitter at its radio room terminals, a suitable voltmeter or voltmeters of approved accuracy shall be permanently installed in the main radio operating room.

§ 8.504 *Requirements of emergency or reserve installation.* (a) All emergency or reserve installations on board vessels subject to Title III, Part II of the Communications Act shall comply with the following conditions, in addition to all other requirements:

(1) The emergency installation shall be capable of being placed in operation (by a qualified operator who is on duty at the operating location) within a maximum time of 1 minute after need arises for its use.

(2) The emergency antenna shall be as efficient as is practicable under the prevailing physical limitations and shall be adequately installed and protected so as to insure proper operation in time of an emergency, and so as not to endanger the ship and the required radio installation.

(3) The emergency transmitter shall be of the electron-tube type[9] and shall be capable of meeting the requirements of § 8.553.

(4) The emergency receiver shall be capable of efficiently receiving radiotelegraph signals, classes A1 and A2 emission, on all frequencies within the band 350 to 515 kilocycles, and class B emission on all frequencies within the band 485 to 515 kilocycles. In addition, it shall be fitted with a head receiver[10] capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive. Where a loudspeaker is additionally provided for use in accordance with the provisions of § 8.204, such device also shall be capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive.

(5) There shall be readily available for use at all times under normal load conditions, when the vessel is leaving or attempting to leave a harbor or port for a voyage in the open sea, while being navigated in the open sea outside a harbor or port, and when required during inspection of the ship radio station by an authorized representative of the Commission, an emergency power supply for the emergency installation (independent of the propelling power of the ship, and any other electrical system; and independent of the main power supply where a separate main and emergency or reserve installation is provided for the purpose of compliance with subsection (a) of section 354 of the Communications Act) capable of supplying electrical power sufficient to energize simultaneously and efficiently the emergency transmitter at its required antenna power[11] and the emergency receiver. Such emergency power supply shall be maintained in readiness to operate effectively and shall have a reserve capacity of at least 6 continuous hours at all times while the vessel is navigated outside a harbor or port and whenever the vessel leaves or attempts to leave a harbor or port of the United States for a voyage in the open sea.

(6) There shall be provided emergency electric lights of not less than 10 watts per unit, capable of being energized solely by the radio installation emergency power supply and connected thereto through individual fuses. These electric lights shall be capable of operation independent of any other electrical system and shall be arranged so as to provide satisfactory illumination of the main and emergency radio operating controls and

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[4] The privileges of the Safety Convention may not be claimed in favor of any ship unless it holds a proper valid certificate. In the event of control giving rise to intervention of any kind in a foreign port, the officer carrying out the control is required to inform the United States Consul of all the circumstances in which intervention is deemed to be necessary.

[5] A safety link may be described as a device which, under heavy stress, will operate to greatly reduce such stress without breakage of the antenna, the halyards, or any other antenna-supporting elements.

[6] Upon proper application and satisfactory demonstration being made, the Commission for the purpose of this regulation will consider approval of transmitters other than those of the electron-tube type, except transmitters employing class B emission.

[7] See paragraph (kk) of § 8.7.

[8] The antenna power specified in § 8.552.

[9] Upon proper application and satisfactory demonstration being made, the Commission for the purpose of this section will consider approval of transmitters other than those of the electron-tube type, except transmitters employing class B emission.

[10] See paragraph (kk) of § 8.7.

[11] The antenna power specified in § 8.553.

radio station clock. The emergency lighting electrical circuits shall be arranged so as to avoid the application of excessive voltage to the emergency lights during the charging of any emergency batteries. The provisions of this paragraph or of paragraph (j) of § 8.8 shall not preclude the use of any other power supply for energizing these lights solely as an additional provision.

(7) All emergency power supply circuits shall be appropriately fused to afford adequate protection from serious overloads or short-circuits.

(8) No electrical load circuits except those of the emergency installation (includes the required radio station emergency light(s)) shall be connected to the emergency power supply: *Provided*, That an approved automatic-alarm-signal keying device, or the audible warning apparatus associated with an approved auto-alarm receiver, or both, may be connected to that part of the emergency power supply furnishing power to the emergency transmitter: *Provided further*, That the reserve capacity of the emergency power supply shall include the additional capacity required to energize, in a normal manner and to a normal extent, any keying device or audible warning apparatus that may be connected as herein authorized, including sufficient capacity to energize any keying device continuously for a period of one hour.

(9) The emergency power supply shall be located as near to the emergency transmitter and receiver as is practicable: *Provided*, That the location of such power supply complies with all applicable rules and regulations of the United States Coast Guard.

(10) The cooling system of all internal-combustion engines used as part of the emergency power supply shall be adequately protected or treated to prevent freezing or overheating consistent with the season and route to be traveled by the particular vessel involved.

(b) (1) The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative shall prove by demonstration prescribed in subparagraphs (2), (3), (4) and (5) of this paragraph or by such other means as may be deemed necessary, that the emergency installation satisfies the 6-hour operating requirement of law.

(2) When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes a storage battery, proof of the ability of such battery power supply to operate continuously and effectively over a prescribed period of time is authorized to be established by a discharge test over such prescribed period of time, when supplying power at the voltage required for normal and effective operation, to an electrical load as prescribed by subparagraph (4) of this paragraph.

(3) When the emergency power supply, on board a vessel required by law to be equipped with a radio installation, consists of or includes an engine-driven generator, proof of the adequacy of the engine fuel supply to operate the unit continuously and effectively over a prescribed period of time may be established by using as a basis the fuel consumption during a continuous period of 1 hour when supplying power, at the voltage required for normal and effective operation, to an electrical load as prescribed by subparagraph (4) of this paragraph.

(4) The electrical load to be supplied by an emergency power supply for the purpose of establishing proof of required capacity shall be computed in accordance with a standard method specified in each case by the official representative of the Commission who observes the particular demonstration of capacity.

(5) At the conclusion of the tests specified in subparagraphs (2) and (3) of this paragraph, no part of the emergency source of power shall have an excessive temperature rise, nor shall the specific gravity or voltage of the storage battery be below the 90 percent discharge point as determined from information (such as voltage curves or specific gravity tables) supplied by the manufacturer for the type of battery involved.

§ 8.505 *Tests of emergency installation.* (a) On vessels required by law to be equipped with an emergency or reserve installation, the condition of this installation shall be determined by test and actual operation prior to the vessel's departure from each port [12] (but not necessarily more than once each day) and on each day the vessel is outside a harbor or port. When storage batteries are used as an emergency power supply or are used for the purpose of starting an emergency engine-driven generator, tests shall be made of the charging circuits for polarity and correct charging rate. Hydrometer readings of the electrolyte of a pilot cell and such other cells as are necessary to determine the state of charge of an emergency lead-acid storage battery and voltage readings under normal load as are necessary to determine the state of charge of emergency storage batteries of other types shall be taken. When an engine-driven generator is used as an emergency power supply, a check shall be made of the quantity of fuel in the supply tank.

(b) When an automatic-alarm-signal keying device is installed in accordance with § 8.508, this device shall be operated to determine that it is in efficient operating condition prior to the vessel's departure from each port (but not necessarily more than once each day) and on each day the vessel is outside a harbor or port. To avoid the actual transmission of auto-alarm signals during such test operation, the radiotelegraph transmitter(s) to which this device is connected shall not be energized.

§ 8.506 *Use of emergency installation.* (a) The emergency installation on board a vessel subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for safety communication [13] except that it may be used for other communication for a period not to exceed 1 hour per day in the aggregate. However, the emergency receiver and its emergency power supply (if such power supply is a storage battery) may be used at any time to maintain a watch for safety purposes, if such use will not reduce the ability of the emergency power supply to energize the emergency installation for a period of at least 6 consecutive hours.

(b) When more than one storage battery is installed on board a ship for the purpose of providing an emergency power supply in compliance with Title III of Part II of the Communications Act, any one of these batteries may be designated at any time as the required emergency power supply or a part thereof, upon the express condition that such battery, whenever so designated, is capable of energizing (independent of the propelling power of the ship and any other electrical system) the associated component or components of the emergency installation for a period of at least 6 consecutive hours.

(c) The emergency power supply on board a cargo vessel (on which a separate [14] main and emergency installation is not provided), subject to Title III, Part II of the Communications Act, while being navigated in the open sea, is authorized to be used only for safety communication [15] except that it may be used for other communication for a period not to exceed 1 hour per day in the aggregate.

(d) Any storage battery whether or not it is the emergency power supply or a part thereof may be used at any time to maintain a watch for safety purposes upon the express condition that such use will not reduce the ability of the emergency power supply to energize the emergency installation for a period of at least 6 consecutive hours as required by subsection (f) of section 354 of the Communications Act.

§ 8.507 *Routing of electrical wiring.* The electrical conductors connecting the main radio installation to its normal power supply and the electrical conductors connecting the emergency power supply to the emergency or reserve installation shall be routed so as to afford adequate protection from mechanical injury, shall be adequately protected from overload by fuses, and shall be kept clear of electrical grounds. If, because of the ship's structure, a long, indirect routing is necessary, an additional equivalent circuit shall be provided over an alternate route.

§ 8.508 *Automatic-alarm-signal keying device.* After July 1, 1951, each passenger ship of the United States and after July 1, 1952, each ship of the United States, which is subject to Title III, Part II of the Communications Act shall be fitted with one or more automatic-alarm-signal keying devices of a type approved by the Commission in accordance with § 8.555.[16]

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[12] It is recognized that in some cases, tank vessels cannot meet this requirement when in port because of the hazardous nature of the cargo being handled.

[13] See paragraph (a) of § 8.6.

[14] See paragraph (b) of § 8.502.

[15] See paragraph (a) of § 8.6.

[16] The provisions of this section (8.508) supersede Order No. 114 of the Commission, and said order is hereby canceled.

§ 8.509 *Installation of automatic-alarm-signal keying device.* (a) The automatic-alarm-signal keying devices required by § 8.508 shall be installed in an accessible location in the radio room so as to be capable of automatically keying alternatively either the main or the emergency transmitter. When only one automatic-alarm-signal keying device is installed for this purpose, means shall be provided in the radio operating room for instantly using this device to key alternatively either the main transmitter or the emergency transmitter: *Provided*, That whenever one transmitter is employed as both a main and emergency transmitter on board a cargo vessel, this requirement will be satisfied when the automatic-alarm-signal keying device is capable of automatically keying this transmitter only. Only one control shall be provided for starting and stopping each automatic-alarm-signal keying device; this control shall be located in the radio room.

(b) The required automatic-alarm-signal keying device shall be capable of operating automatically for a continuous period of at least 1 hour from a source of power independent of the propelling power of the ship and independent of any source of power other than the emergency power supply or the storage battery used to energize a required automatic-alarm receiver.

(c) Each automatic-alarm-signal keying device installed on board a vessel pursuant to § 8.508, shall be furnished with a durable nameplate bearing type and serial number and the month and year of completion by the manufacturer.

§ 8.510 *Auto-alarm.* (a) An auto-alarm which is installed and used on board a cargo vessel of the United States pursuant to the provisions of § 8.205, shall be a type of auto-alarm approved by the Commission in accordance with subsection (x) of section 3 of the Communications Act and § 8.554.

(b) The Commission shall be informed in writing on the prescribed form[17] immediately upon completion of each auto-alarm installation on board any vessel of the United States. Each report shall specify the type and serial number of the alarm, the name of the vessel, the date of completion of installation, the call letters and name of licensee of the ship radio station and the name of the owner and operating company of the vessel.

§ 8.511 *Installation of auto-alarm.* A vessel shall be considered as fitted with an auto-alarm in accordance with the requirements of Title III, Part II of the Communications Act and the radio provisions of the Safety Convention when the auto-alarm is a type approved by the Commission as prescribed by § 8.510 and the auto-alarm installation on board such vessel complies with the conditions prescribed in the following paragraphs of this section.

(b) Each auto-alarm of a type approved by the Commission when first installed on board a vessel of the United States, shall bear an identifying serial number. Two or more principal components of one complete installation shall bear the same number. After the initial installation, if any principal component is entirely replaced, the substitute unit shall bear the serial number of the initial unit but must be identified in addition as a replacement. For this purpose the principal components of the following types of approved auto-alarms are designated as follows:

(1) *Radiomarine Corporation of America Models AR-8600 and AR-8600-X auto-alarms.* One combined receiver and selector unit, without regard to container; one control and terminal box.

(2) *Radiomarine Corporation of America Model AR-8601 auto-alarm.* One combined receiver and selector unit, without regard to container; one control and terminal unit.

(3) *Mackay Radio & Telegraph Co. auto-alarms, Types 101-A and 101-B manufactured by Federal Telegraph Co.* One selector unit without regard to container; one receiver unit, without regard to container.

(4) *Mackay Radio and Telegraph Company, auto-alarm, Type 5001-A.* One combined receiver and selector unit, without regard to container.

(c) The auto-alarm shall be located in the main radiotelegraph operating room and shall be adequately installed and protected so as to insure proper operation.

(d) Approved apparatus shall be provided for giving an audible warning in the main radiotelegraph operating room, in the radio operator's cabin, and on the navigating bridge. This apparatus shall operate continuously after the auto-alarm has been actuated by an alarm signal or by failure of the auto-alarm system, until manually stopped. Only one switch for stopping the audible warning apparatus from functioning is authorized and this shall be located in the main radiotelegraph operating room and shall be capable of manual operation only.

(e) Failure of the auto-alarm to function normally because of prolonged atmospherics (static) or other prolonged interference, or both, shall operate a visual indicator on the bridge. The type and method of installation of such visual indicator shall comply with requirements of the United States Coast Guard.

(f) When an auto-alarm is dependent for effective operation upon a power supply having a voltage within definite upper and lower limits, such auto-alarm shall be fitted with an auxiliary device which (1) will energize the audible alarms if and when this power supply fails or its voltage exceeds the limits specified by the Commission for the particular type of alarm involved; or (2) will automatically connect the auto-alarm to an auxiliary power supply, the voltage of which is within the specified limits.

(g) The testing device[18] of the auto-alarm shall be adjusted to produce a test signal of the correct value. This adjustment shall be considered satisfactory when it becomes necessary to turn the sensitivity control from its position of lowest sensitivity (zero dial position) to its position of approximately one-third maximum sensitivity before the alarm can be actuated.

§ 8.512 *Auto-alarm instructions.* (a) There shall be furnished at least two sets of written instructions for the guidance of the ship station radio operator and ship's officers relative to the auto-alarm, which shall include:

(1) A general technical description of the auto-alarm, including a circuit diagram of the auto-alarm receiver and a wiring diagram of its complete installation on shipboard.

(2) A general explanation of its principles of operation.

(3) A list of faults which may be indicated by the sounding of the audible alarm.

(4) Explanation of how to correct faults, remove and replace defective parts and perform limited repairs at sea.

(5) Explanation of how to test the alarm and adjust the sensitivity control to the "optimum" setting, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(6) Explanation of the effect of various sensitivity control settings upon the operation of the alarm, which shall be summarized upon a card and permanently attached to the front of the alarm in a conspicuous position.

(7) Description of procedure to be followed with respect to operator making adjustments when alarm bell sounds and also in making log entries.

§ 8.513 *Interior communication system.* Pursuant to subsection (g) of section 354 of the Communications Act, an efficient interior communication system shall be provided between the bridge of a ship and the radio room, in all cases where the radio room does not adjoin or open onto the navigating bridge structure; further, an efficient interior communication system shall be provided between the bridge and the location of the direction-finding apparatus whenever the latter is not located on the bridge or within any compartment adjoining or opening onto the navigating bridge structure. When the operating position of the emergency radio installation is not located in the compartment normally used for operating the main radio installation, an efficient interior communication system shall be separately provided between the bridge and each of these radio-operating positions.

§ 8.514 *Requirements for interior communication systems.* The interior communication systems required by § 8.513 shall be capable of providing efficient signalling and communication, shall be independent of any other communication system on the ship, and shall be a type of system approved by the United States Coast Guard. Further, the location and termination of individual systems shall be subject to approval by the Commission.

§ 8.515 *Radio station clock.* The radio station clock required by § 8.114, when installed on board a vessel subject to Title III, Part II, of the Communications

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[17] FCC Form No. 500, available upon request, should be used for this purpose.

[18] See § 8.206 relative to required testing of the auto-alarm.

Act, shall, in addition to the requirements of § 8.114 have a sweep second hand and an hour dial not less than 5 inches in diameter, and shall be capable of operation for at least 8 days on one winding: *Provided*, That deviations from these requirements may be authorized by the Commission if such deviation does not adversely affect the reliability of the clock or the ability of the ship radio operator to transmit properly timed auto-alarm signals. A request for approval of any deviation from these requirements must be accompanied by a sample of the proposed clock face.

§ 8.516 *Direction-finder*. Each passenger ship of 5,000 gross tons or over which is subject to the requirement set forth in subsection (a) (2) of section 351 of the Communications Act shall be equipped with an efficient direction-finder (radio compass) properly adjusted in operating condition and approved by the Commission in accordance with subsection (h) of section 354 of the Communications Act and § 8.517.

§ 8.517 *Requirements for direction-finder*. (a) To be approved by the Commission, as provided by § 8.516, the radio direction finder (radio compass) shall

(1) Be capable of efficiently receiving signals (at least types A2 and B emission) with the minimum of receiver noise, on each radio channel within the frequency band 285 to 515 kc which is designated by the International Radio Regulations for distress, direction-finding, or marine radio beacons;

(2) Be capable of receiving types A1, A2, and B emission, if installed on board ship after January 1, 1940;

(3) Be capable of taking bearings on received radio signals as set forth in subparagraphs (1) and (2) of this paragraph, from which the true bearing and direction may be determined;

(4) Be accurately calibrated for the purpose of taking bearings from which the true bearing and direction may be determined for actual use in maritime radiolocation service and maritime radionavigation service.

(5) Have a sensitivity, in the absence of interference, sufficient to permit of accurate bearings being taken on a signal having a field strength as low as 50 microvolts per meter.

(b) The calibration of the direction finder shall be verified whenever any changes are made in the physical or electrical characteristics or the location of any antenna(s) on board the vessel, or whenever any changes are made in any structure(s) on deck, which might appreciably affect the accuracy of the direction finder. The calibration particulars shall be checked at yearly intervals or as near thereto as possible. A record of the calibrations and of any checks made of their accuracy shall be maintained on board the vessel for a period of not less than one year from date of the related action.

(c) If, in the discretion of the Commission, the direction finder requires recalibration at any time as the result of official inspection or pertinent facts coming to the attention of the Commission, approval for the purpose of section 351 of the Communications Act may be withdrawn pending such recalibration.

§ 8.518 *Auxiliary antenna*. On a vessel required by law to maintain a watch by a qualified operator or operators [19], an effective auxiliary antenna or other approved arrangement shall be provided whenever necessary to avoid unauthorized [19] interruption or reduced efficiency of this watch by reason of unavailability of the normal receiving antenna for use during the period of time when a radio direction finder on board the same vessel is being operated.

§ 8.519 *Lifeboat radio facilities*. Pursuant to section 355 of the Communications Act, every motor lifeboat, required to be equipped with radio by treaty or convention to which the United States is a party, by statute, or by regulation made in conformity with a treaty, convention, or statute, shall be fitted with an efficient radio installation which complies with all requirements set forth in the following § 8.520.

§ 8.520 *Lifeboat radio installation*. (a) Each lifeboat radio installation which complies with the requirements of this section shall be deemed to be efficient for the purpose of section 355 of the Communications Act and to meet all requirements for such installations which the Commission has found necessary to promote the safety of life.

(b) The lifeboat radio installation shall include the following components, as a minimum:

(1) An antenna for transmitting and receiving, either fixed in useable position in the lifeboat or capable of being quickly placed in useable position by a person in the lifeboat while afloat; together with such antenna accessories as are necessary;

(2) An emergency radio transmitter, with radiotelegraph key;

(3) An emergency radio receiver, with headset;

(4) An emergency power supply of required capacity;

(5) The necessary material or device for a "ground" connection to the water when the lifeboat is afloat;

(6) Necessary operating instructions;

(7) Necessary auxiliary equipment and spare parts.

(c) Each of the components specified in paragraph (b) of this section shall be a type of apparatus or shall comprise such items as are approved by the Commission in accordance with the provisions of § 8.556, and, when applicable, §§ 8.557 and 8.558. When all components of any particular lifeboat radio installation have been approved by the Commission, the installation, as such, may be identified specifically as a complete type-approved lifeboat radio installation.

(d) A storage battery power supply of a lifeboat radio installation shall be capable at all times of operating the entire lifeboat radio installation for a period of at least 6 continuous hours in accordance with paragraph (a) (5) of § 8.504. With the exception of the electric starter of the lifeboat motor, the storage battery or batteries may be used, however, to operate equipment other than radio; provided, such additional use of the battery or batteries will not affect, adversely, the ability of the installation to fulfill the foregoing 6-hour radio operating requirement. All individual circuits connected to the transmitter storage battery shall be independently and properly fused.

(e) Any storage battery provided as a power supply for a lifeboat radio installation, or as a reserve power supply therefor, shall be kept adequately charged at all times while at sea. When the vessel is under way, provision shall be made for adequate charging of the storage batteries and the routine inspection of all batteries used to supply the power to lifeboat radio installations. The charging and routine inspection of such batteries shall not require their removal from the lifeboats in which they are installed. The necessary charging equipment shall be arranged so as not to interfere with the launching of the lifeboats, and for this purpose shall be easily and quickly removable. For new radio installations completed after January 1, 1940, in motor lifeboats of ocean-going passenger vessels, the charging circuit for the lifeboat radio storage battery or batteries (when such batteries are used as a source of power) shall be routed through the main radiotelegraph operating room of the vessel. A device which, during charge of the lifeboat radio battery or batteries will give a continuous indication of the polarity and the rate of such charge, shall be connected in this charging circuit, and shall be located in the main radiotelegraph operating room for purposes of frequent observation.

(f) In addition to the foregoing, lifeboat radio installations of the type set forth in § 8.557 shall comply with the following requirements:

(1) Storage batteries shall be mounted in cabinets that will provide protection from salt-water spray and also allow proper ventilation, subject to approval of the United States Coast Guard.

(2) Provision shall be made to protect the operator from the elements when the lifeboat is afloat in a heavy sea.

(3) The use of metal masts and stays, unless broken by insulators or of any structure at electrical ground potential at the masthead(s) is not permitted: *Provided, however*, That this limitation shall not prohibit the use of a metal mast or masts used as the antenna. Provision shall be made for the expeditious erection of the antenna system under adverse weather and sea conditions.

(g) The lifeboat radio installation shall be inspected and tested [20] by a qualified representative of the licensee within 24 hours prior to the ship's departure for sea from each port (except not necessarily more than once each week), and with the lifeboat afloat in a harbor or port of the United States when required by an engineer of the Commission. Such inspection afloat shall include an actual test of the transmitter (and receiver when required) connected to the regular lifeboat antenna(s) erected to determine that each is in effective operating condition. When testing with the lifeboat not afloat, the transmitter may be connected to an artificial antenna. The general result of any such inspection and test, whether or not made in a Commission engineer's presence shall be made known to the master of the vessel and shall be entered in the ship's radio station log or recorded in the ship's log if the ship is not provided with a radio station. Inspection of batteries shall be made at least once every seven days by a qualified representative of the licensee, and their condition, and specific gravity in the case of a lead-acid battery, or voltage under normal load in the case of other type batteries (including dry batteries when such batteries are permitted, shall be reported to the master and entered in the ship's radio station log or recorded in the ship's log if the ship is not provided with a radio station. The records of all inspections and tests shall be made available to duly authorized representatives of the Commission upon request. The shipowner, operating company, or station licensee, if directed by the Commission or its authorized representative, shall prove by demonstration, as may be deemed necessary, that a storage battery used for a required lifeboat radio installation is capable of energizing this installation for the required period of time as is stipulated for an emergency power supply in paragraph (b) of § 8.504.

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[19] See Subparts H and I of this part.

[20] Subject to such limitations as may be imposed by the Administration having jurisdiction at foreign ports. It is necessary that each lifeboat transmitter be licensed by the Commission to insure compliance with the Rules and Regulations of the Commission, during the required tests with an actual antenna. Operation of a lifeboat transmitter is ordinarily authorized by the regular ship station license when it has been described in the application for such license and the authorization has been approved by the Commission. See § 8.68.

§ 8.521 *Auxiliary equipment and components.* (a) On board all vessels subject to Title III, Part II of the Communications Act, sufficient tools to make any minor adjustments of the main and emergency radio installation shall be provided, together with spare parts and auxiliary equipment sufficient to maintain the installations in efficient working condition. These spare parts and this auxiliary equipment are designated in §§ 8.522 to 8.524 inclusive. Pursuant to the provisions of § 8.525, they shall be located so as to be readily accessible to the radio operator in an emergency.

(b) In addition to the spare parts required by § 8.522, and the auxiliary equipment required by § 8.523, spare parts as are specifically designated in special lists [31] promulgated by the Commission pursuant to the provisions of section 356 (a) (2) of the Communications Act shall be provided for transmitters, receivers, auto-alarms, direction finders, lifeboat radio installations, and other required equipment which have been given type approval by the Commission.

§ 8.522 *General spare parts.* The following spare parts are considered indispensable for the general maintenance of the appropriate shipboard radio installations in efficient working condition on board vessels subject to Title III, Part II of the Communications Act:

(1) Sufficient wire of good electrical conductivity and suitable insulators for the erection of a single-wire antenna of the same configuration and linear dimensions as the main transmitting antenna but not less than 300 feet of such wire and not less than two such insulators; or an assembled single-wire transmitting antenna (including suitable insulators) of the same linear dimensions as the main transmitting antenna.

(2) One sleeve bearing of each type used by all rotating machinery which is a component part of the radio installation required by law.

(3) One complete set of brushes for each unit of rotating machinery which utilizes brushes.

(4) Renewable fuse-cartridges of each type used in connection with units of the radio installation in the amount of at least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in actual use, there shall be available six spare fuse links of appropriate capacity. For each nonrenewable fuse in use, there shall be available six spare fuses of the same type and of appropriate capacity.

(5) One spare electric light bulb for each emergency light required by paragraph (a) (6) of § 8.504.

§ 8.523 *General auxiliary equipment.* (a) The following auxiliary equipment is considered indispensable for the general maintenance of the appropriate shipboard radio installations in efficient working condition on board vessels subject to Title III, Part II of the Communications Act.

(1) One 1- to 2-inch screwdriver with approximately ⅛-inch blade.

(2) One 4- to 6-inch screwdriver.

(3) One set of assorted end wrenches or socket wrenches, or one adjustable end wrench.

(4) One pair 5- to 8-inch side-cutting pliers.

(5) One high-resistance direct-current voltmeter having a resistance of at least 1000 ohms per volt and capable of measuring 2, 6, and 110 volts with an accuracy of at least 3 percent except that on ships where the normal radio room power supply voltage is higher than 110 to 120 volts direct current, the voltmeter shall be capable of measuring this line voltage and 2 and 6 volts with an accuracy of at least 3 percent.

(6) One electric flashlight, two-cell or larger, complete with bulb and battery, or one portable emergency electric lamp (protected from mechanical injury) with at least 10 feet of flexible cord and means for rapid connection to the emergency source of power. One spare bulb of the type used shall be provided.

(7) One hydrometer for use with lead-acid batteries when this type of battery is installed.

(8) Approximately one gallon or more of distilled water, or the same amount of any kind of water suitable for use in the type of storage batteries installed.

(9) Instruction book(s) and circuit diagrams, including modifications, covering transmitter(s), receiver(s), and direction finder, if a direction finder is required.

§ 8.524 *Spare parts for specific apparatus.* (a) Prior to the Commission's approval of a particular type of marine transmitter, receiver or direction finder, and prior to the issuance of associated specific lists [32] of required spare parts and auxiliary equipment, the following spare parts and auxiliary equipment relative to specific apparatus shall be provided in addition to those stipulated in §§ 8.522 and 8.523.

(1) *For each electron tube transmitter (other than lifeboat transmitter).* One radio-frequency oscillator tube, one tube for each radio-frequency amplifier stage, and, if used to provide A-2 emission, one audio-frequency oscillator tube. One tube for a main transmitter or two tubes for an emergency transmiter intended for use in the radio-frequency circuit of transmitters of the self-rectified, simple oscillator type. One anode power-supply rectifier tube for each such tube used. One resistor of each type used as a grid leak; one resistor of each type as used in voltage divider of grid-blocking keying circuit; one resistor of each type as used in series with keying relay winding. The value of each resistor shall be clearly indicated thereon.

(2) *Receivers (other than lifeboat receivers).* One complete spare set of tubes for the receiver(s). One headset (telephone receiver) complete with connecting cord and, if used, a cord-terminal plug.

(3) *Direction finders.* One complete set of tubes for the radio receiver incorporated in the direction finder, when a direction finder is required.

(4) *Lifeboat radio installations.* One complete set of spare parts specifically designated and promulgated by the Commission for the particular type of installation which is type-approved in accordance with § 8.556, and when applicable §§ 8.557 and 8.558.

(5) *Auto-alarms.* One complete set of spare parts specifically designated and promulgated by the Commission for the particular type of auto-alarm which is type-approved in accordance with § 8.554.

§ 8.525 *Location of spare parts.* (a) Spare parts for the direction finder receiver shall be kept in the same compartment or room in which this receiver is located.

(b) Spare parts and auxiliary euqipment for the radio-equipped lifeboat, shall be kept in the lifeboat cabin housing the radio equipment.

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[31] Lists of spare parts required for specific types of equipment approved by the Commission are furnished to its inspectors in charge at principal ports and are available to others upon request.

[32] Lists of spare parts required for specific types of equipment approved by the Commission are furnished to its inspectors in charge at principal ports and are available to others upon request.

(c) The spare emergency light bulb(s) shall be mounted in close proximity to the corresponding emergency light socket(s).

(d) The antenna wire, antenna insulators, and distilled water, respectively, may be retained in the radio operating room or elsewhere: *Provided*, The antenna material is readily accessible to the radio operator in an emergency.

(e) All other spare parts and auxiliary equipment shall be securely retained preferably in a single space, readily accessible to the radio operator in an emergency, in the main radiotelegraph operating room, or, if desired, in any associated room adjacent to and connected with the main radiotelegraph operating room by an interconnecting doorway.

(f) The space(s) allocated for the location of spare parts and auxiliary equipment in accordance with paragraph (e) of this section shall be used only for this purpose, and such space(s) shall be appropriately and conspicuously marked.

(g) All required spare parts and auxiliary equipment shall be available for observation by authorized representatives of the Commission at the time of inspection of the ship radio installation.

SUBPART S—TYPE APPROVAL OF COMPULSORY SHIPBOARD EQUIPMENT

§ 8.551 *Scope of type approval.* (a) Approval by the Commission of a particular type of equipment in accordance with the provisions of any section or sections of this subpart, for use on board ships for the purpose of compliance with Title III of Part II of the Communications Act, is extended to all equipment of the same identical type, design, and construction, which is manufactured by the same person.

(b) For the purpose of determining compliance with sections 351 (a), 354 (c), (d), (e), and 356 (a) of the Communications Act, the term "transmitter" means a transmitter proper, together with all auxiliary equipment which is deemed necessary to make this unit operate efficiently as a main and/or emergency transmitter in a ship station at sea. For this purpose, each separate motor-generator, rectifier or other unit required to convert the power available as a primary source or sources on the ship, to the phase, frequency, and/or voltage necessary to energize the transmitter proper is construed to be a component of the transmitter.

§ 8.552 *Requirements for main transmitter.* (a) A main electron-tube transmitter, regardless of the date of its completion, installation, or modification, will be type-approved by the Commission as capable of meeting the relevant requirements of section 354, paragraphs (c) and (d) of the Communications Act if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, is capable of meeting the specific requirements of paragraphs (b), (c), and (d) of this section: *Provided*, That, if deemed necessary, a demonstration of the capabilities of an individual main transmitter installed on board a ship may be required to determine compliance with any or all of the following provisions of this section before initial or continued type approval of such transmitter will be given by the Commission.

(b) *Tabulation of basic technical requirements.*

Operating carrier frequency	Frequency tolerance	Class of emission	Percentage [1] modulation (for amplitude modulation)	Modulation frequency (for amplitude modulation)	Antenna power
500 kc	Plus or minus 0.3 percent until Jan. 1, 1953, except for for transmitters installed after Jan. 1, 1950; plus or minus 0.1 percent for all transmitters installed after Jan. 1, 1950, and for all transmitters after Jan. 1, 1953.	A2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 200 watts into an average ship station antenna.
Do	do	A-1			Not less than 160 watts into an average ship station antenna.
375 kc [2] and 1 authorized working frequency in the band 415 to 490 kc.	do	A-2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 200 watts into an average ship station antenna.
Do	do	A-1			Not less than 160 watts into an average ship station antenna.

[1] In determining percentage modulation, the following concept is taken into account. In linear modulation, the average amplitude of the envelope is equal to the amplitude of the unmodulated wave, provided there is no zero-frequency component in the modulating wave (as in telephony). For modulating waves having unequal positive and negative peaks, positive and negative modulative factors may be defined as the ratios of the maximum departures (positive and negative) of the envelope from its average value, to its average value.

[2] The frequency 410 kc, when ordered by the Commission, shall be required in lieu of 375 kc.

For the purpose of these specific requirements, the term "average ship station antenna" means an actual antenna installed on board ship having a capacitance of 750 micromicrofarads and an effective resistance of 4 ohms at a frequency of 500 kilocycles, or an artificial (dummy) antenna having the same electrical characteristics.

(c) In addition to the foregoing specific requirements, a main transmitter shall be capable of efficient operation at its required antenna power when adjusted to any required operating frequency and when energized by the main power supply of the ship station in which it is installed or a power supply equivalent thereto: *Provided*, That the potential of the main power supply or equivalent power supply is maintained within the tolerance specified in § 8.503; shall be capable of being adjusted rapidly for operation on any one of its required operating frequencies; shall be provided with an arrangement for conveniently reducing the antenna power to not more than 75 watts, and shall conform with all other applicable rules of this part.

(d) A main transmitter shall be equipped with suitable indicating instruments of standard accuracy and reliability to measure (1) the current in the antenna circuit, (2) the potential of the heating current applied to the cathode or cathode heater of each electron tube or a potential directly proportional thereto, and (3) the anode current of the radio frequency oscillator or amplifier which supplies power to the antenna circuit, or in lieu thereof, the anode current of such oscillator or amplifier plus the anode current of any other radio or audio frequency oscillator(s) or amplifier(s) normally employed as part of the transmitter.

(e) Measurements for the purpose of demonstrating compliance with the specific requirements of this section shall be made by methods acceptable to the Commission.

(1) The antenna power shall be determined by the product of the square of the antenna current and the antenna resistance at the operating carrier frequency, both measured at the same point in the antenna circuit and at approximately ground potential.

(f) Each transmitter which was not in existence prior to February 1, 1938, but which is installed after that date on board a vessel in order to comply with the provisions of this section, shall be furnished with a durable name plate with the month and year of its completion permanently inscribed thereon.

§ 8.553 *Requirements for emergency transmitter.* (a) An emergency electron-tube transmitter will be type-approved by the Commission as capable of meeting the relevant requirements of section 354 (c) and (f) of the Communciations Act if it is demonstrated to the satisfaction of the Commission that the transmitter involved, or a transmitter of the same identical type, is capable of meeting the requirements of paragraphs (b), (c) and (d) of this section when energized for a period of at least six continuous hours by a power supply equivalent to the radio station emergency power supply which is or will be, available on board the vessel on which the transmitter is, or will be, installed and operated: *Provided*, That if deemed necessary a demonstration of the capabilities of an individual emergency transmitter installed on board a ship may be required to determine compliance with any or all of the following provisions of this section before initial or continued approval of such transmitter will be given by the Commission.

(b) *Tabulation of basic technical requirements.*

Operating carrier frequency	Frequency tolerance	Class of emission	Percentage modulation [1] (for amplitude modulation)	Modulation frequency (for amplitude modulation)	Antenna power
500 kc	Plus or minus 0.3 percent until Jan. 1, 1953, except for transmitters installed after Jan. 1, 1950; plus or minus 0.1 percent for all transmitters installed after Jan. 1, 1950, and for all transmitters after Jan. 1, 1953.	A-2	Not less than 70; not more than 100.	At least 1 frequency between 300 and 1250 cycles per second; except for transmitters installed after July 1, 1951, at least 1 frequency between 450 and 1250 cycles per second.	Not less than 25 watts into an average ship station antenna.
375 kc [2] and 1 authorized working frequency in the band 415 to 490 kc.	do	A-2	do	do	Do.

[1] In determining percentage modulation, the following concept is taken into account. In linear modulation, the average amplitude of the envelope is equal to the amplitude of the unmodulated wave, provided there is no zero-frequency component in the modulating wave (as in telephony). For modulating waves having unequal positive and negative peaks, positive and negative modulative factors may be defined as the ratios of the maximum departures (positive and negative) of the envelope from its average value, to its average value.

[2] The frequency 410 kc, when ordered by the Commission, shall be required in lieu of 375 kc.

For the purpose of these specific requirements, the term "average ship station antenna" means an actual antenna installed on board ship having a capacitance of 750 micromicrofarads and an effective resistance of 4 ohms at a frequency of 500 kilocycles, or an artificial (dummy) antenna having these same electrical characteristics.

(c) In addition to the foregoing specific requirements, an emergency transmitter shall be capable of efficient operation at its required antenna power when adjusted to any required operating frequency and, when energized by the emergency power supply of the ship station in which it is installed or by a power supply equivalent thereto, shall be capable of being adjusted rapidly for operation on any one of its required operating frequencies, and shall conform with all other applicable rules of this part.

(d) An emergency transmitter shall be equipped with suitable indicating instruments of standard accuracy and reliability to measure the current in the antenna circuit and, if completed by the manufacturer after January 1, 1944, the potential of the heating current applied to the cathode or cathode heater of each electron tube or a potential directly proportional thereto.

(e) Measurements for the purpose of demonstrating compliance with the specific requirements of this section shall be made by methods acceptable to the Commission.

(1) The antenna power shall be determined by the product of the square of the antenna current and the antenna resistance at the operating carrier frequency, both measured at the same point in the antenna circuit and at approximately ground potential.

(f) Each transmitter which was not in existence prior to February 1, 1938, but which is installed after that date on board a vessel in order to comply with the provisions of this section, shall be furnished with a durable name plate with the month and year of its completion permanently inscribed thereon.

§ 8.554 *Requirements for auto-alarm.* (a) To be approved by the Commission pursuant to section 3 (x) of the Communications Act subsequent to January 1, 1951, each type of auto-alarm not approved prior to that date shall comply with the following requirements: *Provided, however,* That the Commission may, in its discretion, approve an automatic alarm receiver which complies with these requirements and can be actuated by the distress signal . . . — — — . . . .

(1) *Basic technical requirements.* (i) The auto-alarm shall be capable of being operated by not less than 3 nor more than 4 consecutive dashes when the dashes vary in duration from 3.5 seconds as a minimum to a maximum approaching 6 seconds as near as practicable (but not more than 6 seconds) and the spaces between dashes vary in duration from 1.5 seconds as a maximum to the lowest practicable value, preferably not more than 10 milliseconds.

(ii) In the presence of interference (provided it is not continuous) caused by atmospherics and powerful signals other than the alarm signal and without manual adjustment during operation, the auto-alarm shall be capable of positive and reliable operation with a minimum available signal of 100 microvolts from the antenna circuit. It shall be capable under these conditions of operation on signals of the following classes of emission:

(*a*) A2 (carrier modulated 30 percent at each modulation frequency from 300 to 1350 cycles per second, inclusive).

(*b*) B (at each tone frequency from 300 to 1350 cycles per second, inclusive).

(iii) It shall not be made inoperative by any signal, groups of signals, or atmospherics and with respect to received radio signals shall be operated so as to actuate the warning device only by the alarm signal specified by subdivision (i) of this subparagraph.

(iv) The overload capacity must be sufficient to enable the auto-alarm to operate with inputs from the antenna circuit up to 1 volt, under normal operating conditions.

(v) In the presence of atmospherics or interfering signals, the auto-alarm shall automatically adjust itself so that within a reasonably short time it approaches the condition in which it can most readily distinguish the alarm signal.

(vi) The auto-alarm receiver shall be capable of operating when the received auto-alarm signals have a radio-frequency of 500 kilocycles with a sensitivity as set forth in subdivision (ii) of this subparagraph, and shall, in addition, respond without adjustment and with the same sensitivity to signals having any radio-frequency from 492 to 508 kc, inclusive. With respect to the reception of signals having a radio frequency outside the band 492 to 508 kc, the sensitivity of the auto-alarm shall decrease as rapidly as possible, in conformity with the best engineering practice.

(vii) The auto-alarm must not be operated, so as to actuate the warning device, by atmospherics or by any signal from the antenna circuit other than the alarm signal: *Provided,* That received signals other than the alarm signal itself do not in fact constitute a signal falling within the tolerance limits indicated in subdivision (i) of this subparagraph.

(viii) When operated by an alarm signal, or in the event of failure of the auto-alarm apparatus, the auto-alarm shall cause a continuous audible warning to be given in the principal radiotelegraph operating room, in the radio operator's cabin, and on the bridge. In so far as may be practicable, the audible alarm shall also be given in the event of any failure of the auto-alarm system, as a whole, which results in the auto-alarm becoming inoperative.

(ix) Only one switch for stopping the aural warning shall be provided and this shall be located in the principal radiotelegraph operating room.

(x) For the purpose of regularly testing the auto-alarm, the apparatus shall include a generator pre-tuned to the 500 kc distress frequency and a keying device by means of which an alarm signal of minimum strength approximately as indicated in subdivision (ii) of this subparagraph is produced solely for actuating the particular auto-alarm and is not radiated beyond the immediate area of the vessel.

(2) *Requirements as to construction.* (i) The auto-alarm shall consist essentially of:

(*a*) A radio receiver capable of receiving signals emissions of classes A2 and B over the entire frequency range 492 to 508 kc inclusive.

(*b*) A selector device capable of selecting the alarm signal specified under subparagraph (1) (i) of this paragraph.

(*c*) A suitable form of audible alarm (minimum of 3 units required).

(*d*) A means of placing the entire system in or out of operation from the principal radio telegraph operating room.

(*e*) A testing device to determine locally that the auto-alarm system is effectively operative.

(ii) The auto-alarm may be constructed in one or more units, but must be independent of the ship's regular radio receiving apparatus.

(iii) A telephone jack shall be provided to permit reception, if desired, by a telephone receiver.[1]

(iv) Tuning and timing controls shall not be accessible to the exterior of the device and shall be so designed and housed as to permit adjustment with special tools only.

(v) Once set into operation the audible alarms must continue to function until switched off in the principal radiotelegraph operating room.

(vi) A simple change-over switch shall be provided to perform the following operations:

(*a*) Disconnect the main antenna from all other equipment and connect it to the auto-alarm receiver and place the auto-alarm system in effective operating condition.

(*b*) Conversely, de-energize the auto-alarm system and reconnect the main antenna to other equipment.

(vii) A non-locking or momentary-throw switch shall be provided to permit temporary disconnection of the audible alarm on the bridge and in the operator's quarters when the auto-alarm system is being tested.

(viii) Suitable means of determining that the supply voltages are within the limits required for proper operation of the auto-alarm system shall be provided.

(ix) The receiver and selector shall be of rugged construction throughout, capable of withstanding continuous and severe vibration equivalent to conditions that may be experienced on board a ship under the worst possible conditions and capable of continuous operation over long periods of time.

(x) All units of the auto-alarm system shall be designed and constructed in accordance with generally accepted principles and practices of modern electronic engineering.

(xi) The auto-alarm system shall not be affected by sudden changes in ambient temperature between zero degrees centigrade and 50 degrees centigrade, shall not be affected by salt atmosphere, and by humidity conditions as high as 90 percent at a temperature of 40 degrees centigrade.

(xii) Condensers, transformers, or other units shall not contain compounds which will flow at temperatures below 85 degrees centigrade, which will crack at temperatures above 0° centigrade, which are hygroscopic or which contain any corrosive substance.

(3) *Requirements as to testing and approval.* (i) Before an auto-alarm receiver will be approved by the Commission pursuant to subsection (x) of section 3 of the Communications Act a sample type of such auto-alarm receiver must be submitted for the purpose of demonstrating by means of suitable laboratory and field tests, that it complies with these requirements. Such tests will be conducted by the Commission, the National Bureau of Standards and other cooperating government departments under the test specifications set forth under subparagraph (5) of this paragraph.

(ii) Failure to pass any specified test may result, by order of the Commission, in the discontinuance of all tests on the unit or component involved and the immediate rejection of the entire apparatus.

(iii) Manufacturers' tests of the complete device and/or of any components thereof shall be conducted in the laboratory or shop of the manufacturer(s). These tests shall be carried out in accordance with the provisions of subparagraph (4) of this paragraph.

(iv) Laboratory tests conducted by the National Bureau of Standards and/or by any other cooperating Government department, under test specifications prescribed by the Commission shall be at the expense of the manufacturer or person submitting the device for approval. A report of the tests conducted by the Bureau of Standards, and/or other Government department, will be submitted to the Commission only: *Provided*, That such reports will be made available to the manufacturer involved at a subsequent date to be determined by the Commission.

v) Field tests, as deemed necessary or desirable.

(4) *Requirements as to manufacturers' tests.* (i) The following tests shall be conducted by the manufacturer of the auto-alarm device, who shall submit data in affidavit form showing that such tests have been made as hereinafter required prior to submission of a working model for type tests: *Provided, however*, That properly authenticated data obtained from manufacturers of parts used in the construction of the device may be submitted in lieu of the results of such tests conducted by the manufacturer of the complete device. The Commission may require that any or all of the prescribed tests be witnessed by its representative(s).

(*a*) The insulation resistance of the windings and terminals to case and core of transformers and electromagnet coils and the dielectric resistance of condensers shall be measured and data recorded for the information of the Commission.

(*b*) Transformers and/or electromagnet coils shall be energized continuously under normal conditions of operation for a period of one hour at an ambient temperature of 25 degrees centigrade. For purposes of making this test, maximum rated voltage at rated frequency with the secondary of transformers normally loaded and with the frame or enclosure grounded will be applied. Under these conditions the temperature of each transformer and/or electromagnet coil shall not be such as to affect injuriously any of the material used in construction and the temperature rise of the unit undergoing test shall not exceed 40 degrees centigrade at the end of one hour.

(*c*) Immediately after each transformer and/or electromagnet coil has been tested under subdivision (*b*) of this subparagraph, a test for breakdown capability will be made by applying between windings and between each winding and the core or enclosure, for a period of five minutes, a potential ten times the maximum rated effective potential of the circuit in which the coil or winding is connected.

(*d*) All components containing wax or other sealing, insulating or electrolytic compounds shall be placed in an oven and the ambient temperature brought to 75 degrees centigrade and maintained for a period of 15 minutes. They shall then be placed in a refrigerator and the ambient temperature brought to zero degrees centigrade and maintained for a period of 15 minutes. If sealing, insulating or electrolytic compounds flow during this oven test or crack during this refrigerator test, these units will not be acceptable for use as components in the device. The electrical characteristics of each unit shall be measured at these temperatures and any deviations from their normal ratings that would adversely affect the operation of the auto-alarm device shall preclude the use of that component.

(*e*) A sample of each completed[2] electromagnetic winding, fixed metallic[3] resistor, or fixed condenser used for any component of the device shall be immersed in a salt solution composed of two pounds of pure sodium chloride to one gallon of water. The temperature of this solution shall be carried through at least five complete cycles of temperature ranging form normal ambient room temperature (approximately 25 degrees centigrade) to 50 degrees centigrade throughout a period of three days. At the expiration of this test the component shall be washed clean, wiped and dried for a period not exceeding one hour in an atmosphere having a relative humidity of not less than 50 perecnt and a temperature of not more than 30 degrees centigrade. All terminals and windings and condenser dielectrics shall again be measured and recorded for the information of the Commission. The ohmic value of resistors at the beginning and expiration of this test shall also be measured and recorded. Inspection, with case removed if necessary, should evidence no mechanical or electrical defect, or material reduction in insulation; otherwise, the component shall not be acceptable for use in the device.

(5) *Requirements as to laboratory tests.* (i) The following tests shall be conducted at the National Bureau of Standards, Washington, D. C., and shall be at the expense of the manufacturer or person submitting the auto-alarm for approval. The report of these tests will be furnished by the Bureau to the Commission only. Tests will be conducted as described in the following paragraphs with the auto-alarm connected to an artificial antenna consisting of a 20 microhenry inductance, a 500 micromicrofarad capacitor and a 5 chm resistor connected in series. The receiver will be tested with its internal sensitivity control (if provided) set at maximum sensitivity, except where otherwise specified.

(*a*) Test of sensitivity of the auto alarm at the radio frequency 500 kc to determine operation of the aural warning device.

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[1] See paragraph (kk) of § 8.7.

[2] A "completed" winding of this purpose is either the winding itself, taped and treated; or the winding together with the unit of which it is an inherent part.

[3] This test need not be applied to carbon resistors.

(1) Measurement of minimum alarm signal input, A2 emission 30 percent modulated with a 300 cycles per second tone, required to operate aural warning device.

(2) Test of operation using 100 microvolts alarm signal input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(3) Test of operation using 1 volt alarm signal input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(4) Using A2 emission, 30 percent modulated with a 1350 cycles per second tone, test as in subdivisions (1), (2), and (3) of this subparagraph.

(5) Test of aural warning device operation with 50 microvolts noise input and 100 microvolts alarm signal, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(b) Test to determine operation of aural warning device from a 100 microvolts alarm signal, A2 emission, 30 percent modulated with a 300 cycles per second tone transmitted on any radio frequency or frequencies selected by the Commission from 492 to 508 kc, inclusive.

(c) Test of auto alarm operation with internal receiver sensitivity control (if provided) set at minimum setting at which 100 microvolts input on the radio frequency 492 kc will operate aural warning device with simultaneous inputs of 100 microvolts auto-alarm signal, A2 emission, 30 percent modulation with an 800 cycles per second tone on 492 kc and 200,000 microvolts, A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 350 kc; similar tests with the same alarm signal and a 25,000 microvolts, A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 460 kc; similar test with internal receiver sensitivity control (if provided) set at minimum setting at which 100 microvolts input on the frequency 508 kc will operate aural warning device with simultaneous input of A2 emission (800 cycles per second modulation) unkeyed signal on the frequency 540 kc at 25,000 microvolts; and similar test with this latter signal on the frequency 650 kc at 200,000 microvolts.

(d) Test of selector response to dashes from 3.5 up to 6.0 seconds in duration when the spaces between the dashes have a duration from 10 milli-seconds to 1.5 seconds. These tests shall be made on the radio frequency 500 kc with an input of 100 microvolts, A2 emission, 30 percent modulated with 300 cycles per second tone.

(e) Test of ability to avoid selector response to the radio telegraph radiolocation signal "MO", the "M" being sent in 3.5 seconds and the "O" in 4.5 seconds with 0.1 second space between dashes. These tests shall be made on the radio frequency 500 kc using 100 microvolts input, A2 emission, 30 percent modulated with a 300 cycles per second tone.

(f) Test of ability of the aural warning device to operate satisfactorily when the auto-alarm becomes inoperative under the following conditions:

(1) Filament burn-out of any electron tube in the apparatus;

(2) Failure of power supply; and

(3) Prolonged static.

(g) Tests to determine capability of proper operation of auto-alarm over long periods of time under any condition which may be expected on board ships while being navigated during extreme weather and sea conditions.

(1) The auto-alarm device shall be placed in operation for a period of one hour while subjected to each of the following conditions of temperature and relative humidity:

(i) 50 degrees centigrade and 50 percent relative humidity.

(ii) 30 degrees centigrade and 95 percent relative humidity.

(iii) Zero centigrade and 50 percent relative humidity.

(2) The auto-alarm device shall be placed in operation for a sufficient length of time under the following conditions to determine whether or not it will operate properly under such conditions:

(i) While the device is being rocked in such manner as to simulate a roll and pitch of 45 degrees from the vertical;

(ii) When subjected to severe vibration comparable to that which might be experienced on board ship, as for example when subjected to vibrations having a period between 20 and 30 cycles per second and an amplitude[4] of at least 0.03 inch in a direction at an angle of 30 to 45 degrees with the base of the device.

(h) Test of the testing device incorporated in the auto alarm.

(i) Tests to determine satisfactory operation of the apparatus on a 500 kc alarm signal at temperatures of approximately 20 and 50 degrees centigrade. Tests to be made on the frequencies 500, 492 and 508 kc with an input of 100 microvolts, A2 emission, modulated 30 percent with a 300 cycles per second tone.

(j) General inspection of electrical and mechanical features.

(6) *Requirements as to field test.* (i) This test shall be conducted 24 hours a day for a period of not less than 30 consecutive days and shall be for the purpose of ascertaining the reliability of the auto-alarm and its freedom from false operation under practical interference conditions. For this test the auto-alarm shall be connected to an antenna typical of the average main antenna on shipboard and its operation shall be observed continuously during this period.

(ii) During this test period a minimum of 500 test alarm signals shall be transmitted locally while the test antenna is connected to the auto-alarm. The power used for the production of this test alarm signal shall be produced by a suitable radio frequency generator coupled to the antenna system. The receiver internal sensitivity adjustment (if provided) shall be set at the optimum value for the prevailing noise level. During the official test period, adjustment of the auto-alarm shall not be made more than once in each 12 consecutive hours.

(iii) Tests for response to the alarm signal shall be made on at least the radio frequencies 492, 500 and 508 kc in a proportion on each frequency as determined by the Commission.

(b) Each type of auto alarm approved by the Commission prior to the effective date of this section is approved, as to its type for use on board ship as provided by section 353 of the Communications Act or by the applicable provisions of the Safety Convention until such time as the Commission in consideration of developments with respect to improved types of auto alarms, may terminate, in accordance with appropriate rule making proceedings, such type approval.[5]

(c) No change shall be made in any auto-alarm under the type approval identification issued by the Commission, except upon specific authorization by the Commission to make such change(s). When it is desired to make any change, an application therefor, together with pertinent detailed information shall be submitted to the Commission for consideration and appropriate action.

(d) Type approval of an auto-alarm when given by the Commission, may be for a limited period of time only, and is subject to withdrawal if the device proves defective in service and cannot be relied upon under usual conditions of maintenance and operation encountered on board ships at sea. Withdrawal of approval means that no further devices of the particular model affected may be installed, but will not immediately apply to such devices already installed unless it is found that there has been an unauthorized change in design or construction, or the material or workmanship is defective.

§ 8.555 *Requirements for automatic-alarm-signal keying device.* (a) To be approved by the Commission for use in compliance with § 8.508 and to be recognized as being capable of functioning in compliance with §§ 8.508 and 8.509. Each type of automatic-alarm-signal keying device shall comply with the requirements set forth in this section.

(b) No change shall be made in any automatic-alarm-signal keying device under the type approval identification issued by the Commission, except upon specific authorization by the Commission to make such change(s). When it is desired to make any change, an application therefor, together with pertinent detailed information shall be submitted to the Commission for consideration and appropriate action.

(c) Type approval of an automatic-alarm-signal keying device when given by the Commission, may be for a limited period of time only, and is subject to withdrawal if the device proves defective in service and cannot be relied upon under usual conditions of maintenance and operation encountered on board ships at sea. Withdrawal of approval means that no further devices of the particular model affected may be installed, but will not immediately apply to such devices already installed unless it is found that there has been an unauthorized change in design or construction, or the material or workmanship is defective.

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[4] 0.03 inch total excursion, i. e., 0.015 inch each side of the position of rest.

[5] The provisions of this paragraph supersede any provisions of any order heretofore promulgated by the Commission which are in conflict herewith.

(1) *Basic technical requirements.* (i) The automatic-alarm-signal keying device may consist of one or more units, either separate and distinct from other units of the ship's radio installation or may be incorporated, if approved by the Commission, as part of any other unit.

(ii) The device shall be designed so as to properly operate, on board ships at sea, the normal keying circuits of any transmitter approved by the Commission for use as a main or as an emergency transmitter in compliance with section 354 of the Communications Act of 1934, as amended.[6]

(iii) Timing-adjustment controls shall not be accessible from the exterior of the device and shall be designed and housed so as to prevent adjustment by unauthorized persons.

(iv) The keying mechanism shall operate so as to repeatedly transmit the alarm signal. For this purpose the dashes transmitted shall have a duration within the limits of 3.8 to 4.2 seconds, and spaces between each of the twelve dashes constituting a series shall have a duration within the limits of 0.8 to 1.2 seconds. Spaces between each series of twelve dashes shall have a duration within the limits of 0.8 second to one minute.

(v) A single control, protected so as to avoid accidental manipulation, shall be provided for placing the device itself into full operation within a maximum period of 30 seconds. Once set into operation, the device shall be capable of continuously and properly operating without further attention for a period of not less than one hour.

(vi) The automatic-alarm-signal keying device shall be capable of being energized solely by a source of power independent of the propelling power of the ship and independent of any other system: *Provided, however,* That the device may be energized by the radio station emergency power supply and any storage battery power supply regularly used for operating a required automatic alarm receiver.

(vii) When the proper operation of the device is dependent upon the maintenance of any inherent conditions of operation within relatively narrow limits, the Commission, as a provision of its approval, may prescribe such limits and require that the device shall include means for indicating to the operator when deviations from the conditions occur.

(viii) Instructions concerning the proper adjustment of the device and the correct indication of any instrument incorporated for the purpose of revealing improper operation, shall be inscribed in a durable manner on a plate mounted on the device in a position to be easily read by the operator.

(ix) Means shall be provided to insure that when the "on-off" control of the device is placed in the "off" position, the keying circuit to the radio transmitter(s) is automatically opened.

(2) *Requirements as to construction.* (i) The design of the automatic-alarm-signal keying device shall be in accordance with the modern engineering practice and the device shall be capable of operating under conditions of constant and severe vibrations and extreme variations of temperature and humidity equivalent to those experienced on board ships at sea under the worst possible conditions. This requirement applies only to use of the device on board such types of vessels as are normally subject to Title III, Part II of the Communications Act.

(ii) A durable nameplate shall be mounted on each device showing the name of the manufacturer, the type and serial number and the month and year of completion by the manufacturer. However, this nameplate need not be provided on a working model submitted to the Commission for type testing and approval.

(3) *Requirements as to testing and approval.* (i) Before an automatic-alarm-signal keying device is approved by the Commission, a working model of the particular type for which approval is desired shall be submitted for inspection, and it shall be demonstrated by means of suitable type tests that it complies with these requirements. The model equipment will be operated in these tests in the same way and under conditions similar to those encountered in actual service. In connection with such tests, the manufacturer shall supply all instructions and/or services which are intended to be supplied to the purchaser of the equipment, including a proposed instruction book and a tentative list of spare parts as would normally be supplied with shipboard installations.

(ii) Failure to pass any specified test may result, by order of the Commission, in the discontinuance of all tests on the particular device involved and in the immediate rejection thereof: *Provided,* That the Commission, within its discretion, may relax to a reasonable extent the provisions of subparagraph (4) of this paragraph with respect to an automatic-alarm-signal keying device which is included as an integral part of any automatic-alarm receiver approved by the Commission and completed by the manufacturer prior to the effective date of these requirements and Type Tests.

(iii) Manufacturers' tests of the complete device and/or of any components thereof shall be conducted in the laboratory or shop of the manufacturer(s). These tests shall be carried out in accordance with the following requirements under the heading "Manufacturers' Tests" and at the expense of the manufacturer or person submitting the device for approval.

(iv) Laboratory tests shall be conducted by the National Bureau of Standards, and/or by any other cooperating government department, under test specifications prescribed by the Commission and shall be at the expense of the manufacturer or person submitting the device for approval. A report of the tests conducted by the Bureau of Standards, and/or other government department, will be submitted to the Commission only: *Provided,* That such reports will be made available to the manufacturer involved at a subsequent date to be determined by the Commission.

(v) Field tests, as deemed necessary or desirable.

(4) *Requirements as to manufacturers' tests.* (i) Tests shall be conducted by the manufacturer of the automatic-alarm-signal keying device, who shall submit proof in affidavit form that they have been made as required, together with supporting data: *Provided, however,* That properly authenticated data obtained from manufacturers of parts used in the construction of the device may be submitted in lieu of the results of such tests conducted by the manufacturer of the complete device.

(ii) Sufficient tests shall be applied to all components to determine the durability of materials, character of workmanship, and that the electrical and/or mechanical characteristics are those required for efficient operation of the device.

(5) *Requirements as to laboratory tests.* (i) The automatic-alarm-signal keying device shall be capable of operating the keying circuit of any transmitter approved by the Commission for use as a main transmitter or as an emergency transmitter in compliance with section 354 of the Communications Act of 1934.[7] For the purpose of demonstrating compliance with this requirement the transmitter keying circuit of the device shall be tested for a direct current carrying capacity of two amperes through a non-inductive resistance of 115 ohms. Terminals, electrical conductors and keying contacts shall be of sufficient size and properly spaced and insulated for these values of current and for the voltage which will necessarily be applied in this test. During this test arcing shall not occur when the keying contacts are operated, which would unduly affect the duration of the dashes and spaces between dashes, or which would otherwise adversely affect the operation of an approved radiotelegraph transmitter keyed by the device.

(ii) The automatic-alarm-signal keying device, if electrically driven, shall be capable of operation when the required electrical energy is furnished solely by an independent power supply. For the purpose of demonstrating compliance with this requirement, the following tests are prescribed:

(*a*) The device shall be operated continuously for a period of one hour from a power supply equivalent to the radio station emergency power supply or the required automatic-alarm receiver storage battery power supply of vessels on which the device is to be used,[8] or from a separate and independent source of power furnished as an integral part of the device. For this operation test the potential of the electrical power supply, if used, shall be varied over a voltage range of plus or minus 15 percent of the rated potential of such power supply, during which the transmitted dashes shall have a duration within the limits of 3.8 to 4.2 seconds, and spaces between dashes shall have a duration within the limits of 0.8 to 1.2 seconds.

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[6] A list of transmitters approved by the Commission for this purpose will be furnished upon request.

[7] A list of the types of transmitters approved by the Commission for this purpose will be furnished upon request.

[8] Radio station emergency power supplies having potentials of 12, 24 and 110 volts are commonly used on board vessels of the United States. Twelve-volt emergency power supplies are most common on these vessels. Approved automatic alarm receivers used on board United States ships to date are energized by a storage battery power supply of either 6 or 24 volts.

(b) The electrical circuits of the device shall be inspected and tested as may be necessary to determine whether or not they are properly fused for adequate protection of the device and the power supply.

(iii) The automatic-alarm-signal keying device shall be capable of properly operating the keying circuit of an approved radiotelegraph transmitter so as to transmit the alarm signal for a continuous period of one hour, under any condition which may be expected on board ships while being navigated during extreme weather and sea conditions. For this purpose the following tests are prescribed in addition to the test prescribed in subdivision (ii) of this subparagraph:

(a) The keying device shall be placed in operation for a period of one continuous hour while subjected to each of the following conditions of temperature and relative humidity:

(1) 50 degrees centigrade and 50 percent relative humidity.

(2) 30 degrees centigrade and 95 percent relative humidity.

(3) Zero centigrade and 50 percent relative humidity.

(b) The keying device shall be placed in operation for a sufficient length of time under the following conditions to determine whether or not it will operate properly under such conditions:

(1) While the keying device is being rocked in such a manner as to simulate a roll and pitch of 45 degrees from the vertical, that is, over an arc of 45 degrees in two planes normal to the horizon and perpendicular to each other.

(2) When subjected to severe vibration comparable to that which might be experienced on board ship, as for example when subjected to vibrations having a period between 20 and 30 cycles per second and an amplitude[9] of at least 0.03 inch in a direction at an angle of 30 to 45 degrees with the base of the device.

(3) The keying device shall be inspected to determine whether or not all delicate parts are properly enclosed and protected from moisture and from mechanical injury and whether or not components are accessible as may be necessary for inspection and repair, when in service.

(4) The keying device shall be inspected and tested as may be necessary to determine the effectiveness of adjustment controls and means for making these adjustments under service conditions together with precautions taken to prevent tampering wih adjustments.

(5) Indicating instruments (when provided[10]) and operating controls shall be inspected to determine whether indication is given that the device is in satisfactory operation when the starting control is placed in the "on" position and to determine that a single control for starting and stopping is provided, capable of placing the device in full operation within 30 seconds from the time the control is placed in the "on" position.

§ 8.556 *Requirements for lifeboat radio equipment.* (a) Each type of lifeboat radio installation shall, in order to be approved by the Commission pursuant to section 355 of the Communications Act and § 8.519, comply with the specific requirements set forth in either § 8.557 or § 8.558, and additionally in paragraphs (b) and (c) of this section.

(b) The components and assembly of the entire lifeboat radio installation shall insure the utmost dependable operation, and the design shall be such that heavy vibration and physical shocks to which a lifeboat is subject will cause no damage. All components shall be housed and treated so as to withstand saline dampness for extended periods without damage and to minimize the adverse effect of prolonged exposure to salt water or salt spray.

(c) Instructions shall be plainly marked on the apparatus in sufficient detail which will inform inexperienced or uninstructed personnel how to place the lifeboat radio equipment in operation and how to transmit appropriate signals for a sufficient period of time to enable vessels or land stations, within communication range and equipped with radio direction finders, to determine the position of the lifeboat.

§8.557 *Requirements for non-portable lifeboat radio equipment.* (a) The following minimum requirements apply to lifeboat radio installations which are not intended to be portable in nature and which are designed primarily for fixed installations in the larger class of motor lifeboat:

(1) Assigned frequency on which transmitter operates: 500 kc.

(2) Class of emission of transmitter: A2.

(3) Frequency tolerance of transmitter: 0.5 percent.

(4) Power of transmitter: Not less than 75 watts plate input power to the oscillator or amplifier supplying power to the antenna when such oscillator or amplifier is effectively coupled to an antenna equivalent to that specified in subparagraph (5) of this paragraph.

(5) Antenna: A single wire inverted L-type for use not less than 20 feet above the water line with a horizontal section of the maximum practicable length.

(6) Receiver: Electron tube type, continuous frequency range of at least 350 to 550 kc and capable of reception of classes A1, A2, and B emission; equipped with a head receiver capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive.

(7) The type of power supply shall be: for the transmitter; a storage battery; for the receiver; dry cell battery and/or storage battery. The necessary power for the transmitter and receiver, at voltages other than the battery voltages, may be obtained by the use of a dynamotor or other suitable device approved by the Commission.

(8) The lifeboat radio transmitter shall be fitted with a radio frequency ammeter of suitable range and scale, connected so as to indicate the current in the antenna circuit.

(b) In addition to compliance with the requirements of paragraph (a) of this section, each lifeboat radio installation shall be supplied with auxiliary equipment consisting of one screwdriver, one pair of side-cutting pliers, and one artificial antenna capacitor.

(c) In addition to compliance with the requirements of paragraph (a) of this section, the following designated spare parts, as specifically approved and identified by the Commission in relation to the particular type of approved installation, shall be supplied with each lifeboat radio installation:

(1) At least 35 feet of insulated wire suitable for use as antenna wire.

(2) Two antenna insulators.

(3) Two tubes for radiotelegraph transmitters, except when transmitter employs a single transmitting tube, in which case one tube is required.

(4) One complete set of tubes for the radiotelegraph receiver.

(5) One panel electric light bulb, if used.

(6) Renewable fuse-cartridges of each type used in connection with the units of the lifeboat radio installation or which are used in circuits connected to the lifeboat radio installation power supply in the amount of at least one-half the number of each size and type in actual use. For each renewable fuse-cartridge in actual use, there shall be available six spare fuse links of appropriate capacity. For each non-renewable fuse in use, there shall be available six spare fuses of the same type and of appropriate capacity. If fuse wire is used, sufficient wire shall be provided to permit six complete fuse replacements.

§ 8.558 *Requirements for portable lifeboat radio equipment.* (a) The minimum requirements set forth in the following paragraphs of this section apply to lifeboat radio installations which are intended to be portable in nature.

(b) The lifeboat radio installation shall consist of an efficient and reliable emergency transmitter and emergency receiver (such radio receiver to be provided with a head receiver capable of effective operation at every audio frequency from 100 to 3000 cycles per second, inclusive), an emergency power supply, an antenha wire and insulator assembly for use with a lifeboat sailing mast, an antenna wire and reel assembly for use with a balloon and a kite, an approved container of gas for inflating the balloon, an approved kite, a ground system, an artificial antenna, and such auxiliary equipment and spare parts as are prescribed in paragraphs (i) and (j) of this section, and shall comply with the following general requirements:

(1) The transmitter, receiver and power supply shall be enclosed in a single container: *Provided*, That operational parts of these components not adversely affected by immersion in sea water need not be so enclosed; and not more than

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[9] 0.03 inch total excursion, i. e., 0.015 inch each side of the position of rest.

[10] See subparagraph (1) (VII) and (VIII).

two containers shall be required to house the complete installation. The container enclosing the transmitter, receiver and power supply shall be water-tight and capable of withstanding complete submersion in sea water for a continuous period of two hours without leakage. This container shall be capable of withstanding this submersion with all manual operating controls and all indicating devices and instruments unprotected from contact with sea water. Any other container provided shall be of durable and splash-proof construction. Suitable protection shall be provided for the operating controls, indicating devices and instruments, including the microphone and the head telephone(s), against physical harm from accidental or inadvertent blows, and from the adverse effects of prolonged exposure to the weather. The container enclosing the transmitter, receiver and power supply shall be durably constructed of steel or aluminum, or alloys thereof, and shall be suitably protected against the adverse effects of sea water and saline dampness. Provision shall be made to protect the operator from the elements while the lifeboat is afloat in a heavy sea.

(2) The container housing the transmitter, receiver and power supply shall be provided with a non-corrosive cartridge type desiccator installed in a manner which will permit convenient inspection, maintenance and replacement.

(3) The physical dimensions and shape of the container(s) shall require the minimum amount of space consistent with the design of the equipment.

(4) The weight of the complete installation shall not exceed 160 pounds.

(5) The design and construction of the entire installation shall be such that no tools are required to place it in operation for routine tests or for emergency communication.

(6) All component parts used in the installation shall be of acceptable quality for marine service.

(7) The complete installation shall be efficient and reliable in its operation and shall be ruggedly constructed and capable of withstanding the shock and vibration to which a lifeboat may be subjected.

(8) Each installation shall be equipped with a durable name plate mounted on the transmitter, receiver, power supply or control panel, or made an integral part thereof, showing at least the following: The type or model number, the name of the manufacturer, the month and year of manufacture, and the rated power output for each frequency and each type of emission into each artificial antenna specified in § 8.205 (b) (1).

(9) Suitable printed instructions together with sketches covering the erection of the antenna(s) and operation of the equipment shall be permanently and conspicuously attached to the control panel or the surface of the transmitter, receiver and power supply container, or shall be made an integral part thereof. These instructions shall be as simple as possible consistent with the amount of detail required by an unskilled person to operate the equipment for automatic radiotelegraph communication and for radiotelephony. In addition, these instructions shall include sufficient information to permit an unskilled person to manually transmit the radiotelegraph distress signal . . . — — — . . . and the auto-alarm signal and a statement that the latter signal is effective only if transmitted on the frequency 500 kilocycles. These instructions shall be durable and waterproof.

(10) Each installation shall be provided with a copy of an instruction manual covering the design, installation, operation and maintenance of the apparatus.

(c) (1) The radio transmitter shall comply with the following requirements:

Operating carrier frequencies	Frequency tolerance (percent)	Class of emission	Modulation percentage	Modulation frequency	Power into antenna supported by kite or balloon	Power into antenna supported by lifeboat mast
500 kc	0.1	A2	Not less than 70	Not less than 450; nor greater than 1250 c. p. s.	Not less than 5 watts.	Not less than 2 watts.
500 kc	.5	A3	Not less than 70 nor greater than 100.	400 to 3000 c. p. s.	Not less than 4 watts unmodulated carrier.	Not less than 1.5 watts unmodulated carrier.
8280 kc	.02	A1			Not less than 4 watts.	Not less than 3 watts.
8280 kc	.02	A3	Not less than 70 nor greater than 100.	400 to 3000 c. p. s.	Not less than 4 watts unmodulated carrier.	Not less than 3 watts unmodulated carrier.

(2) The transmitter radio frequency control circuits shall be pretuned to the required frequencies and shall be of such design and construction that the operating frequencies are maintained within the prescribed tolerances under varying antenna circuit characteristics and conditions of adjustment. The frequency control circuit adjustment(s) shall be securely locked to prevent detuning as a result of shock or vibration and shall not be readily available to the person using the transmitter.

(3) The indicated modulation percentage shall be determined as the average of the modulation percentages of the positive and negative peaks.

(4) The indicated power into the antenna supported by the kite or balloon shall be developed on 500 kilocycles into an artificial antenna of 500 micromicrofarads capacitance and 15 ohms resistance, and on 8280 kilocycles into an artificial antenna of 300 ohms resistance.

(5) The indicated power into the antenna supported by the lifeboat sailing mast shall be developed on 500 kilocycles into an artificial antenna of 100 micromicrofarads capacitance and 10 ohms resistance and on 8230 kilocycles into an artificial antenna of 50 ohms resistance.

(6) Controls shall be provided on the operating panel for efficient transfer of radio frequency energy at each required operating frequency to antennas having the following characteristics at 500 kilocycles: 80 to 750 micromicrofarads of capacitance and 10 to 20 ohms of resistance. An initial adjustment of these controls shall effectively resonate the antenna circuit at each required operating frequency and this condition shall be maintained without further adjustment of these controls during a normal operating period of the transmitter.

(7) Provision shall be made for keying the transmitter manually and by automatic means on 500 kilocycles and 8280 kilocycles. Provision shall be made for automatic transmission of the international distress signal "SOS", in one or more groups of three "SOS" signals, followed by a continuous dash not less than 12 seconds nor more than 20 seconds in duration. Provision shall be made for automatically changing the operating frequency of the transmitter from 500 kilocycles to 8280 kilocycles, and vice versa, with a frequency transfer time interval not to exceed five seconds so that the automatically keyed transmission sequence specified herein will take place alternately on 500 kilocycles and 8280 kilocycles. The speed of automatic telegraph transmission shall not exceed 16 words per minute. Simple and reliable controls shall be provided so that the operator of the transmitter can quickly and conveniently place it in operation in accordance with any of the three required modes of transmitter operation; that is, manual radiotelegraph, automatic radiotelegraph and manual radiotelephone operation, provided, that not more than one manual switch adjustment shall be made to place the transmitter in operation for automatic radiotelegraph transmission, and under this condition of operation the receiver shall be completely de-energized. The transmitter and the receiver, including their controls, shall be arranged mechanically and electrically so that they can be operated efficiently and conveniently from the same operating position for manual radiotelegraph communication on the required operating frequencies and so that the time necessary to change from transmission to reception, and vice versa, on these frequencies is as short as possible and in no event more than ten seconds.

(8) The transmitter shall be equipped with reliable visual indicators (such as neon tubes) to indicate antenna resonance at each operating frequency with any antenna normally provided. Failure of these indicators shall have no effect on the actual operation of the transmitter.

(d) The emergency receiver shall comply with the following requirements:

(1) The receiver shall provide reception on the frequency 500 kilocycles and shall be capable of manual tuning between the frequencies 8100 and 8600 kilocycles for operation on the frequency 8380 kilocycles.

(2) The receiver shall be capable of responding to classes A 2 and A 3 emission on the frequency 500 kilocycles and

on all frequencies in the range 8100 to 8600 kilocycles.

(3) The sensitivity of the receiver shall be such that at least 6 milliwatts of audio power is developed in a non-inductive load resistor having an ohmic value equal to the value of the load resistance into which the output audio amplifier stage is designed to operate, at a signal to noise power ratio of not less than 10 to 1 when the receiver is supplied through the appropriate artificial antennas specified in paragraph (f) of this section with the following radio frequency signals:

Carrier frequency kilocycles	Signal strength microvolts	Modulation factor	Modulation frequency
500 8,280	25 100	0.3 .3	400 c. p. s. 400 c. p. s.

The noise power present in the output of the receiver when the receiver is adjusted for reception of classes A 2 and A 3 emission on the frequencies 500 kilocycles and 8280 kilocycles shall be determined with an unmodulated input signal of the indicated strength.

(4) The receiver shall be equipped with only one manually operated volume control. The effect of this control together with an automatic sensitivity control circuit, if used, shall permit the receiver to operate normally without overload when an input signal of one volt modulated 20 percent at 400 cycles per second is applied to the receiver input terminals through the appropriate artificial antennas specified in paragraph (c) of this section.

(5) The receiver shall be capable of maximum "undistorted" audio frequency output power of 10 milliwatts.

(6) The over-all electric fidelity of the receiver shall be such that with a zero decibel 1000 cycle reference the maximum response deviation at any frequency between 400 and 2000 cycles per second will not exceed 4 decibels.

(7) The selectivity of the receiver shall be at least as follows:

Ratio of input voltage off resonance to input voltage at resonance	Bandwidth at 500 kilocycles	Bandwidth at 8280 kilocycles
10 100 1000	20 kc 40 kc 60 kc	30 kc 60 kc 90 kc

(e) The emergency power supply shall comply with the following requirements:

(1) The source of power shall be a manually operated electric generator capable of efficiently energizing the lifeboat radio installation.

(2) The mechanical power applied to the crank handle(s) or the propelling lever(s) of the generator driving mechanism shall not exceed a maximum of 0.15 horsepower for any required condition of operation of the lifeboat radio installation at any temperature of the generator and its associated driving mechanism between minus 30 degrees and 125 degrees Fahrenheit. Under these conditions the speed of rotation of the crank handle(s) shall not be greater than 70 revolutions per minute or the cycle of operation of the propelling lever(s) shall not be greater than 70 cycles per minute.

(3) The voltages applied to the radio installation shall not vary from their normal values more than 20 percent at any generator speed in excess of the normal operating speed which can be manually developed.

(f) The antenna assemblies shall comply with the following requirements:

(1) The antenna assembly required for use with a balloon and a kite shall consist of a reliable reel constructed of materials resistant to the corrosive effects of sea water and saline dampness, containing 300 feet of flexible stranded or braided copper or copper alloy wire of high conductivity having a tensile strength of not less than 60 pounds. This wire shall be securely fastened at one end to the reel and effectively insulated electrically. If an insulating cord is used it shall have a tensile strength at least equal to that of the antenna wire, and the material(s) used therein shall be such that the cord is not weakened by kinking or wetting. This reel shall be associated with the container housing the transmitter, receiver and power supply in a manner which will provide mechanical protection and protection from the weather to the reel, and shall be designed and mounted in a manner which will permit convenient unwinding and rewinding of the antenna wire. Means shall be provided for conveniently and effectively connecting the antenna wire to the proper radio installation antenna terminal.

(2) The required balloon when inflated with gas shall be capable of effectively supporting the 300-foot antenna wire and shall comply with the requirements of § 8.560.

(3) The required container of gas shall be capable of effectively inflating the balloon, and shall comply with the requirements of § 8.560.

(4) The required kite shall be capable of effectively supporting the 300-foot antenna wire, and shall comply with the requirements of § 8.559.

(5) The required antenna assembly for use with a lifeboat sailing mast shall consist of a length of not less than 40 feet of No. 10 stranded copper wire having at least 80 strands, with the antenna insulators necessary for effective insulation of the antenna when used with a lifeboat sailing mast.

(g) The artificial antenna shall comply with the following requirements:

(1) The artificial antenna shall provide a reliable load for the transmitter, for test purposes at the frequencies 500 kilocycles and 8280 kilocycles, of approximately the same electrical characteristics as the mast supported antenna required by paragraph (c) (5) of this section.

(2) The artificial antenna shall be housed in a single container and provided with appropriate terminals for the necessary characteristics. If more than two terminals are provided on the artificial antenna, all the terminals shall be properly labeled. The physical dimensions of this container shall permit convenient storage of the unit in one of the containers specified in paragraph (b) of this section.

(h) The ground system shall comply wth the following requirements:

(1) The radio installation when installed in a metal hull lifeboat shall be effectively grounded to the hull of the lifeboat. This ground connection shall be physically located in a position where it is inaccessible to the normal movement of occupants or accessories in the lifeboat.

(2) The radio installation when installed in a lifeboat having a nonmetallic hull shall be provided with a grounding conductor consisting of a length of not less than 20 feet of No. 10 bare stranded copper wire of equivalent copper braid effectively weighted at one end for immersion in the sea. This conductor shall be securely fastened to an effective ground terminal on the radio installation.

(i) In addition to compliance with the requirements of the foregoing paragraphs of this section, each lifeboat radio installation shall be supplied with auxiliary equipment consisting of one screwdriver and one pair of side-cutting pliers.

(j) In addition to compliance with the requirements of the foregoing paragraphs of this section, the following designated spare parts, as specifically approved and identified by the Commission in relation to the particular type of approved installation, shall be supplied with each lifeboat radio installation:

(1) One electron tube of each type used for normal operation of the radio installation in accordance with the requirements governing the installation, including neon or any other type of tube or lamp employed as resonance indicator(s).

(2) Six fuses of each type used which shall be of the same rating and interchangeable therewith.

(3) Where a kite and balloon are used for an antenna support, one spare 300-foot length of antenna wire of the type used which shall be of the same rating and interchangeable therewith.

§ 8.559 *Requirements for lifeboat antenna kites.* (a) Each type of kite supplied with a lifeboat radio installation as prescribed in paragraph (b) of § 8.558 shall, in order to be approved by the Commission, meet the following requirements:

(1) *Frame.* The frame may be of wood or of metal. It must be strong and be collapsible or be easily disassembled for storage. If of wood, the wood must be treated to prevent absorption of water, unless it naturally does not take up much water. If of metal, all the metal parts must be treated with a corrosion resistant finish, unless they are of noncorrodible material.

(2) *Cloth.* The cloth shall be of a strong and durable material. It shall have a thread count in warp and fill of not less than 115 and a tensile strength (grab method) of not less than 30 pounds in warp and fill. The material shall be fast dyed a bright yellow. The cloth shall be adequately treated so as to be water repellent. The finished cloth shall

not be stiff or tacky even under wide ranges of temperatures.

(3) *Buoyant material.* The kite, when assembled for flying, must be buoyant. Any buoyant material added must be securely fastened to the kite and not seriously interfere with its flight.

(4) *Dimensions and shape.* The kite may be of any desired shape, such as box, etc., provided it can be easily assembled and handled.

(5) *Antenna connector.* Each kite shall be provided with a strong and secure means for the attachment of the antenna to the kite.

(6) *Instructions.* Each kite shall be accompanied by a set of instructions written in simple and clear language so that a person may assemble and fly the kite even though he may have had no previous experience with kites.

(7) *Container.* Each kite shall be packed in a rigid and sealed container. The container shall be as small as possible and shall be rigid enough to protect the kite even though it may be stepped upon by persons getting in a lifeboat. The container shall be easy to open and not require the use of tools. A metal tear-strip with a key removably soldered to the top is acceptable. The provision is not applicable if the kite is stowed in a watertight compartment with other components of the radio installation.

(8) *Marking.* Each container shall be permanently marked to show the contents, the name of the manufacturer, the place of manufacture, the date of packing, and the model number of the kite.

(b) *Tests.* Any samples or manufactured kites may be subjected to such tests as may be necessary to determine whether they are suitable for the purpose intended. Among the tests that may be performed are:

(1) *Storage test.* One year storage aboard ship or in a laboratory in which the container containing the kite may be subjected to Fahrenheit temperatures between 70 degrees below zero to 150 degrees above zero.

(2) *Use test.* The kite shall be removed from its container and sent aloft at Fahrenheit temperatures between 30 degrees below zero to 140 degrees above zero. The kite shall function properly and the cloth shall show no signs of serious cracking, brittleness, tackiness or other evidence of deterioration.

(3) *Launching test.* The kite shall be assembled, the antenna wire attached, and successfully launched by a person sitting in a lifeboat, the wind being of a velocity between 7 and 10 miles per hour.

(4) *Lift test.* The kite shall raise and hold aloft in even flight an antenna approximately 300 feet long and weighing approximately 12 ounces. It shall maintain its flight at an angle of not less than 30 degrees in a wind of not more than 10 miles per hour.

§ 8.560 *Requirements for lifeboat antenna balloons.* (a) Each type of balloon and associated inflating apparatus supplied with a lifeboat radio installation as prescribed in paragraph (b) of § 8.558 shall, in order to be approved by the Commission, meet the following requirements:

(1) *Material.* The balloon may be constructed of any gas impermeable flexible material that can be relied upon to stand storage for long periods in a folded condition and will also withstand the effect of sunlight, temperature change, humidity, etc., likely to be encountered at sea. The material must be of such a nature that it can be easily packed, together with the valve and other gas filling fittings, into a rigid container of not more than 70 cubic inches capacity.

(2) *Gas.* The gas to be used for inflating the balloon must be nonflammable and at the same time provide adequate buoyancy. The gas shall be furnished in a strong steel cylinder having an overall length of not over 30 inches and a diameter of not over 8 inches. A quantity of gas sufficient to inflate the balloon to a volume of 38 to 44 cubic feet shall be furnished in the steel cylinder. In lieu of steel cylinder filled with gas, a gas generator may be furnished. The generator must be fireproof and the gas generated must not be of a flammable or explosive nature. A fitting or other means shall be supplied with the cylinder or the generator so that the balloon may be quickly and easily inflated and without excessive loss of gas, even by an inexperienced person. Neither the gas cylinder, together with its gas nor the gas generator together with its chemicals shall weigh over 25 pounds.

(3) *Dimensions and shape.* If spherical, the balloon shall be approximately 48 inches diameter when inflated so as to provide a buoyancy of 20 ounces available for supporting an antenna. The balloon may be of any desired shape provided it supplies the 20 ounce lift. The use of fins or other means for providing stable flight of the balloon during windy periods is acceptable provided that the balloon can be packed away easily in the 70 cubic inch container.

(4) *Antenna connection.* Each balloon shall be provided with a strong and secure means for the attachment of the antenna to the balloon.

(5) *Valve.* Each balloon shall be fitted with a valve which will allow the balloon to be filled with gas in a quick and simple manner. If a gas generator is provided, the fitting shall be of such a nature that the balloon may be drained of any liquid that may have collected inside. Any metal parts of the valve must be made of non-corrodible material.

(6) *Instructions.* Simple, clear and concise instructions shall accompany each balloon so that a person who has never operated one before may successfully inflate it without injury to the balloon or excessive loss of gas. The instructions may be made in a permanent manner on the outside of the container.

(7) *Container.* Each balloon shall be packed in a rigid airtight container. The container shall not exceed 70 cubic inches capacity nor shall it be over 6 inches in any one dimension. Preferably, the container shall be fitted with an inert gas so as to preserve the balloon. The can must be easy to open. A metal tear-strip around the top with a key removably soldered to the top is satisfactory.

(8) *Marking.* Each container shall be marked to show the contents, the name of the manufacturer, the place of manufacture, the date of packing, and the model number of the balloon.

(b) *Tests.* Any samples of manufactured balloons may be subjected to such tests as may be necessary to determine whether they are suitable for the purpose intended. Among the tests that may be performed are:

(1) *Storage test.* One year storage aboard ship or in a laboratory in which the container containing the balloon may be subjected to Fahrenheit temperature between 70 degrees below zero to 150 degrees above zero.

(2) *Use test.* The balloon shall be removed from its container and inflated and sent aloft at Fahrenheit temperatures between 30 degrees below zero to 140 degrees above zero. The balloon shall function properly and show no signs of serious cracking, tackiness, stickiness or other evidences of deterioration.

(3) *Lift test.* The balloon shall be inflated with about 35 cubic feet of helium gas so as to inflate the balloon to its regular size. It shall then support an antenna of approximately 300 feet length and weighing approximately 12 ounces at an angle of not less than 30 degrees from the horizontal during a wind of not over 15 miles per hour. In the above lift tests, the balloon shall maintain the antenna aloft for 48 hours without further addition of gas.

SUBPART T—VIOLATIONS

§ 8.601 *Answers to notice of violation.* (a) Any person receiving official notice of a violation of the terms of the Communications Act, any legislative act, Executive Order, treaty to which the United States is a party, terms of a station or operator license, or the rules and regulations of the Federal Communications Commission, shall, within 3 days from such receipt, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent, or an acknowledgment made within such 3-day period, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. The answer shall contain a full explanation of the incident involved and shall set forth the action taken to prevent a continuation or recurrence thereof. If the notice relates to lack of attention to, or improper operation of the station, or to log or watch discrepancies, the answer shall give the name and license number of the licensed operator on duty.

(b) When an official notice of violation, impending violation, or discrepancy, pertaining to any provision of Part II of Title III of the Communications

Act or the radio provisions of the Safety Convention, is served upon the master or person responsible for a vessel and any instructions appearing on such document as issued by a representative of the Commission are at variance with the content of paragraph (a) of this section, then the instructions issued by the Commission's representative shall supersede those set forth in paragraph (a) of this section.

§ 8.602 *Reports of infringements of the International Radio Regulations.* In the event that infringement of the International Radio Regulations by a foreign station is detected, report thereof may be made by the submission to the Commission of a form similar to that set forth in Appendix 2 of the International Radio Regulations.

[F. R. Doc. 50-8203; Filed, Sept. 21, 1950; 8:46 a. m.]

NOTICES

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[Misc. #55603]

CALIFORNIA

RESTORATION TO HOMESTEAD ENTRY OF LANDS WITHIN THE KLAMATH NATIONAL FOREST

SEPTEMBER 18, 1950.

Pursuant to the recommendation of the Department of Agriculture and in accordance with section 2.22 of departmental Order No. 2583 of August 16, 1950 (15 F. R. 5645), the land described below in the Klamath National Forest, California, is hereby opened to homestead settlement and entry as provided by the act of June 11, 1906 (34 Stat. 233; 16 U. S. C. 506-509), as amended, and the regulations thereunder in 43 CFR, Part 170, in the manner hereinafter described:

MOUNT DIABLO MERIDIAN

List 5-3011—T. 46 N., R. 12 W.,
  Sec. 14, lots 18 and 23;
  Sec. 23, lots 2, 5 and 8.
  Norman C. and Gladys M. Valpey, preferred applicants.

The area described contains 3.39 acres.

1. The persons named, on whose application the land was listed, will be accorded a preference right for 60 days from the date of publication of this order in the FEDERAL REGISTER within which to make homestead entry of such tract under the said act of June 11, 1906.

2. For a period of 90 days from the expiration of the 60-day preference right period accorded the applicants, the land if remaining unentered will be subject to entry by qualified veterans of World War II and other qualified persons entitled to preference under the act of September 27, 1944 (58 Stat. 747; 43 U. S. C. 279-284), as amended.

3. The land if unentered at the expiration of the 90-day preference right period, will, on the following business day, become subject to homestead settlement and entry under the provisions of the act of June 11, 1906, by any qualified persons.

WILLIAM ZIMMERMAN, Jr.,
Assistant Director.

[F. R. Doc. 50-8289; Filed, Sept. 21, 1950; 8:45 a. m.]

[1606481]

CALIFORNIA

NOTICE OF FILING OF PLAT OF SURVEY

SEPTEMBER 18, 1950.

Notice is given that the plat of extension survey of the following described lands, accepted April 1, 1943, will be officially filed in the Land Office, Los Angeles, California, effective at 10:00 a. m. on the 35th day after the date of this notice:

SAN BERNARDINO MERIDIAN

T. 10 N., R. 22 E.
  Sec. 3, lot 3,
  Sec. 10, lots 1, 2, W½NE¼, E½SW¼, SE¼,
  Sec. 11, lots 1, 2,
  Sec. 14, lots 1, 2, 3, 4, SW¼NW¼, W½SW¼, SE¼SW¼,
  Sec. 15, E½NW¼, E½,
  Sec. 22, lots 1, 2, 3, 4, 5,
  Sec. 23, lots 1, 2, 3, 4, 5, 6, N½SW¼, NW¼.

The area described aggregates 1,642.04 acres.

All the lands are included in first form withdrawal for reclamation purposes by the Secretary October 16, 1931—1433125.

All the lands involved are withheld from entry until boundaries of the Hay and Wood Reserves, Fort Mohave Indian Reservation, have been determined by the Secretary, December 3, 1926—1242462.

Lot 3, sec. 3, lots 1, 2, W½NE¼, E½SW¼, SE¼ sec. 10, E½NW¼, E½ sec. 15, lots 4, 5, sec. 22, T. 10 N., R. 22 E., S. B. M., are embraced in Power Site Classification No. 55, California 18, adjusted by Interpretation 51 dated July 17, 1924 (F), August 22, 1924—1093936.

Anyone having a valid settlement or other right to any of these lands initiated prior to the date of the withdrawals of the lands should assert same within three months from the date on which the plat is officially filed by filing an application under the appropriate public land laws, setting forth all facts relative thereto.

All inquiries relating to these lands should be addressed to the Manager, Land Office, Los Angeles, California.

WILLIAM ZIMMERMAN, Jr.,
Assistant Director.

[F. R. Doc. 50-8290; Filed, Sept. 21, 1950; 8:45 a. m.]

[1944464]

CALIFORNIA

NOTICE OF FILING OF PLAT OF SURVEY

SEPTEMBER 18, 1950.

Notice is given that the plats of (1) dependent resurveys of lots 1, 2, E½SW¼ sec. 18, W½ sec. 22, W½ sec. 25, W½ sec. 36, T. 13 S., R. 6 E.; SW¼ sec. 18, SW¼ sec. 26, W½ sec. 35, T. 14 S., R. 8 E., S. B. M., delineating a retracement and reestablishment of the lines of the original surveys as shown on the plats approved August 27 and September 20, 1880, and (2) Extension Surveys in T. 13 S., R. 6 E., T. 14 S., R. 8 E., S. B. M., California, of the following described lands accepted July 7, 1948, will be officially filed in the Land Office at Los Angeles, California, effective at 10:00 a. m. on the 35th day after the date of this notice:

SAN BERNARDINO MERIDIAN

T. 13 S., R. 6 E.,
  Secs. 1 to 17, inclusive,
  Sec. 18, lots 3 to 12, inclusive,
  Sec. 22, lots 1 to 8, inclusive,
  Sec. 23, all,
  Sec. 24, all,
  Sec. 25, lots 1 to 8, inclusive,
  Sec. 36, lots 1 to 8, inclusive.
T. 14 S., R. 8 E.,
  Secs. 1 to 17, inclusive,
  Sec. 18, N½, SE¼,
  Sec. 23, all,
  Sec. 24, all,
  Sec. 25, all,
  Sec. 26, N½, SE¼,
  Sec. 35, E½,
  Sec. 36, all.

The area described aggregates 28,137.82 acres.

Available data indicates the lands are mountainous desert in character.

No applications for these lands may be allowed under the homestead, small tract, desert land, or any other nonmineral public land laws unless the land has already been classified as valuable or suitable for such type of application or shall be so classified upon consideration of an application.

At the hour and date specified above the said lands shall, subject to valid existing rights and the provisions of existing withdrawals, become subject to application, petition, location, or selection as follows:

(a) *Ninety-one day period for preference-right filings.* For a period of 91 days, commencing at the hour and on the day specified above, the public lands affected by this notice shall be subject only to (1) application under the homestead or the desert-land laws or the Small Tract Act of June 1, 1938, 52 Stat. 609 (43 U. S. C. 682a), as amended, by qualified veterans of World War II and other qualified persons entitled to preference under the act of September 27, 1944, 58 Stat. 747 (43 U. S. C. 279-284), as amended, subject to the requirements of applicable law, and (2) application under any applicable public-land law, based on prior existing valid settlement rights and preference rights conferred by existing laws or equitable claims subject to allowance and confirmation. Applications under subdivision (1) of this paragraph shall be subject to applications and claims of the classes described in subdivision (2) of this paragraph. All applications filed under this paragraph either at or before 10:00 a. m. on the 35th day after the date of this notice shall be treated as though filed simultaneously at that time. All applications filed under this paragraph after 10:00 a. m. on the said 35th day shall be considered in the order of filing.

(b) *Date for non-preference-right filings.* Commencing at 10:00 a. m. on the 126th day after the date of this notice, any lands remaining unappropriated shall become subject to such application, petition, location, selection, or other appropriation by the public generally as may be authorized by the public-land laws. All such applications filed either at or before 10:00 a. m. on the 126th day after the date of this notice, shall be treated as though filed simultaneously at the hour specified on such 126th day. All applications filed thereafter shall be considered in the order of filing.

A veteran shall accompany his application with a complete photostatic, or other copy (both sides), of his certificate of honorable discharge, or of an official document of his branch of the service which shows clearly his honorable discharge as defined in § 181.36 of Title 43 of the Code of Federal Regulations, or constitutes evidence of other facts upon which the claim for preference is based and which shows clearly the period of service. Other persons claiming credit for service of veterans must furnish like proof in support of their claims. Persons asserting preference rights, through settlement or otherwise, and those having equitable claims, shall accompany their applications by duly corroborated statements in support thereof, setting forth in detail all facts relevant to their claims.

Applications for these lands, which shall be filed in the Land Office, Los Angeles, California, shall be acted upon in accordance with the regulations contained in § 295.8 of Title 43 of the Code of Federal Regulations and Part 296 of that title, to the extent that such regulations are applicable. Applications under the homestead laws shall be governed by the regulations contained in Parts 166 to 170, inclusive, of Title 43 of the Code of Federal Regulations, and applications under the desert-land laws and the said Small Tract Act of June 1, 1938, shall be governed by the regulations contained in Parts 232 and 257, respectively, of that title.

Inquiries concerning these lands shall be addressed to the Manager, Land Office, Los Angeles, California.

WILLIAM ZIMMERMAN, Jr.,
Assistant Director.

[F. R. Doc. 50-8291; Filed, Sept. 21, 1950; 8:45 a. m.]

[1996982]

CALIFORNIA

NOTICE OF FILING OF PLAT OF SURVEY

SEPTEMBER 18, 1950.

Notice is given that the plat of (1) dependent resurvey of the SW¼ sec. 23, SE¼ sec. 24, T. 2 N., R. 17 E., S. B. M., delineating a retracement and reestablishment of the lines of the original survey as shown upon the plat approved January 10, 1857, and (2) extension surveys in T. 2 N., R. 17 E. and T. 1 N. R., 18 E., S. B. M., California, of the following described lands accepted May 12, 1949, will be officially filed in the Land Office, Los Angeles, California, effective at 10:00 a. m. on the 35th day after the date of this notice. The lands affected by this notice are described as follows:

SAN BERNARDINO MERIDIAN

T. 2 N., R. 17 E.,
  Sec. 11, all,
  Sec. 14, all,
  Sec. 23, lots 1 to 12, inclusive,
  Sec. 24, lots 1 to 12, inclusive,
T. 1 N., R. 18 E.,
  Sec. 4, all.

The area described aggregates 2,920.86 acres.

Available data indicates that the lands described are relatively flat and highly mineralized and lie within Danby Dry Lake.

No applications for these lands may be allowed under the homestead, small tract, desert land or any other non-mineral public land laws unless the land has already been classified as valuable or suitable for such type of application or shall be so classified upon consideration of an application.

At the hour and date specified above the said lands shall, subject to valid existing rights and the provisions of existing withdrawals, become subject to application, petition, location, or selection as follows:

(a) *Ninety-one day period for preference-right filings.* For a period of 91 days, commencing at the hour and on the day specified above, the public lands affected by this notice shall be subject only to (1) application under the homestead or the desert-land laws or the Small Tract Act of June 1, 1938, 52 Stat. 609 (43 U. S. C. 682a), as amended, by qualified veterans of World War II and other qualified persons entitled to preference under the act of September 27, 1944, 58 Stat. 747 (43 U. S. C. 279-284), as amended, subject to the requirements of applicable law, and (2) application under any applicable public-land law, based on prior existing valid settlement rights and preference rights conferred by existing laws or equitable claims subject to allowance and confirmation. Applications under subdivision (1) of this paragraph shall be subject to applications and claims of the classes described in subdivision (2) of this paragraph. All applications filed under this paragraph either at or before 10:00 a. m. on the 35th day after the date of this notice shall be treated as though filed simultaneously at that time. All applications filed under this paragraph after 10:00 a. m. on the said 35th day shall be considered in the order of filing.

(b) *Date for non-preference-right filings.* Commencing at 10:00 a. m. on the 126th day after the date of this notice, any lands remaining unappropriated shall become subject to such application, petition, location, selection, or other appropriation by the public generally as may be authorized by the public-land laws. All such applications filed either at or before 10:00 a. m. on the 126th day after the date of this notice, shall be treated as though filed simultaneously at the hour specified on such 126th day. All applications filed thereafter shall be considered in the order of filing.

A veteran shall accompany his application with a complete photostatic, or other copy (both sides), of his certificate of honorable discharge, or of an official document of his branch of the service which shows clearly his honorable discharge as defined in § 181.36 of Title 43 of the Code of Federal Regulations, or constitutes evidence of other facts upon which the claim for preference is based and which shows clearly the period of service. Other persons claiming credit for service of veterans must furnish like proof in support of their claims. Persons asserting preference rights, through settlement or otherwise, and those having equitable claims, shall accompany their applications by duly corroborated statements in support thereof, setting forth in detail all facts relevant to their claims.

Applications for these lands, which shall be filed in the Land Office, Los Angeles, California, shall be acted upon in accordance with the regulations contained in § 295.8 of Title 43 of the Code of Federal Regulations and Part 296 of that title, to the extent that such regulations are applicable. Applications under the homestead laws shall be governed by the regulations contained in Parts 166 to 170, inclusive, of Title 43 of the Code of Federal Regulations, and applications under the desert-land laws and the said Small Tract Act of June 1, 1938, shall be governed by the regulations contained in Parts 232 and 257, respectively, of that title.

Inquiries concerning these lands shall be addressed to the Manager, Land Office, Los Angeles, California.

WILLIAM ZIMMERMAN, Jr.
Assistant Director.

[F. R. Doc. 50-8292; Filed, Sept. 21, 1950; 8:45 a. m.]

National Park Service

[Order 2]

DELEGATION OF AUTHORITY TO CERTAIN OFFICIALS WITH RESPECT TO EXECUTION AND APPROVAL OF CONTRACTS AND LEASES

SECTION 1. *Execution and approval of contracts.* (a) The following officers and employees of the National Park Service may enter into contracts, not in excess of the amounts specified in this paragraph, for construction, supplies, or services in conformity with applicable regulations and statutory requirements and subject to the availability of appropriations:

(1) Superintendents employed in areas administered by the National Park Service in which the position of the Superintendent is allocated to a civil service grade of GS-5 to GS-9, inclusive: $5,000.

(2) Superintendents employed in areas administered by the National Park Serv-

ice in which the position of the Superintendent is allocated to a civil service grade of GS-10 or above: $10,000.

(3) The Finance Officer of the National Park Service, Regional Directors, and Superintendent, National Capital Parks: $50,000.

(b) Regional Administrative Officers and Chief Clerks employed in areas administered by the National Park Service in which the position of the Superintendent is allocated to a civil service grade of GS-10 or above may enter into contracts, not in excess of $10,000, for supplies or services, in conformity with applicable regulations and statutory requirements and subject to the availability of appropriations.

(c) Approval by the Secretary of the Interior, the Director, or the Regional Directors is not a condition precedent to the consummation of a contract entered into pursuant to paragraphs (a) and (b) above, not in excess of the amounts hereinbefore stated, unless the Secretary or the Director by a written order published in the FEDERAL REGISTER specifically prescribes such a requirement with respect to a particular contract, or unless approval of the contract by the Secretary is specifically required by statute.

(d) Regional Directors may approve contracts for construction, supplies, or services entered into by the field officers within their respective regions in conformity with applicable regulations and statutory requirements and subject to the availability of appropriations when the amount of each such contract does not exceed $50,000.

(e) (1) With respect to any contract entered into pursuant to paragraphs (a) and (b) above, including a contract approved by the Secretary, the Director, or the Regional Directors, the contracting officers mentioned in subparagraphs (a) (1) and (2) and paragraph (b) of this section may issue change orders and extra work orders pursuant to the contract and enter into modifications of the contract which are legally permissible, where each such change order, extra work order, or modification of the contract is in an amount less than $500: *Provided*, That the aggregate of all such change orders, extra work orders, or modifications of the contract entered into by the contracting officer shall not exceed ten per cent (10%) of the contract price.

(2) With respect to contracts entered into in their respective regions, including contracts approved by the Secretary or the Director, the Regional Directors may issue or approve change orders and extra work orders pursuant to the contract and enter into or approve modifications of the contract which are legally permissible, and terminate the contract if such action is legally authorized, irrespective of the amounts involved in such change orders, extra work orders, modifications, or terminations.

SEC. 2. *Execution and approval of leases.* (a) Regional Directors and the Superintendent, National Capital Parks, may lease space in real estate outside of the District of Columbia, in conformity with applicable regulations and statutory requirements and subject to the availability of appropriations. Approval by the Secretary of the Interior or the Director is not a condition precedent to the consummation of a lease agreement unless the Secretary or the Director, by written order published in the FEDERAL REGISTER, prescribes such a requirement with respect to a particular lease or type of lease, or unless secretarial approval is specifically required by statute.

(b) With respect to any such lease, including a lease approved by the Secretary or the Director, the officers mentioned in section 2 (a) may modify or renew the lease if such action is legally permissible, and may terminate the lease if such action is legally authorized.

(c) Proposed leases, renewals, and modifications which would increase the area or rental involved should be cleared either with a division field office or with the Washington office of the Public Buildings Service unless (1) the lease, modification, or renewal involves the acquisition of office space for a period of less than 6 months at a rental that is lower than $500 per annum, or (2) the lease involves the acquisition of space other than office space at an annual rental of less than $500, or (3) the lease involves space in real estate located outside the borders of the United States.

(d) The termination or lapse of a lease which has been cleared by the Public Buildings Service should be reported to a division field office or the Washington office of that agency.

(e) A copy of U. S. Standard Form 81, "Request for Clearance of Lease," or of Form REM 6, "Request for Clearance of Space," or of P-SC Form No. 6, "Request for Approval of Lease," for each lease and each modification or renewal of a lease shall be transmitted to the Chief Clerk of the Department and to the Director. If the lease, modification, or renewal has been cleared with a division field office or the Washington office of the Public Buildings Service, that fact shall be indicated on the copies sent to the Chief Clerk and the Director.

SEC. 100. *Revocation.* This order supersedes § 10.3, Part 10, Title 36, Code of Federal Regulations, 1947 Supplement.

(Secretary's Order No. 2509, dated January 13, 1949; 39 Stat. 535, 16 U. S. C. 2.)

Issued this 5th day of September 1950.

NEWTON B. DRURY,
Director.

[F. R. Doc. 50-8316; Filed, Sept. 21, 1950; 8:49 a. m.]

DEPARTMENT OF AGRICULTURE

Office of the Secretary

[Secretary's Memorandum No. 1270]

DELEGATION OF FUNCTIONS UNDER THE DEFENSE PRODUCTION ACT OF 1950

SEPTEMBER 15, 1950.

Pursuant to the provisions of Executive Order No. 10161 delegating functions to the Secretary of Agriculture under the Defense Production Act of 1950, the following delegations of functions, to be exercised under my general direction and supervision, are hereby made:

(1) All functions vested in the Secretary of Agriculture or the Department of Agriculture under Parts I, II, III except in respect to lumber, and VII of said order, are hereby delegated to the Administrator, Production and Marketing Administration.

(2) The functions vested in the Secretary of Agriculture by Part III of the Executive Order in respect to lumber, are hereby delegated to the Chief of the Forest Service.

(3) The functions vested in the Secretary of Agriculture by Part IX of the Executive Order are hereby delegated to the agencies affected hereby including the authority of redelegation as prescribed therein.

(4) The heads of agencies delegated functions herein may utilize, with the consent of the head thereof, the services of any other agency within the Department in carrying out the functions delegated herein.

(5) The Administrator of Production and Marketing Administration shall also have, with respect to food as defined in the said Executive Order, the following functions:

(a) Immediate responsibility for carrying out any other functions delegated to or otherwise vested in the Department under the provisions of the Defense Production Act of 1950, including Title IV—Price and Wage Stabilization, but excluding Title VI—Control of Consumer and Real Estate Credit; and

(b) Maintenance of liaison and coordination with, and advice to other governmental agencies concerned with functions under provisions of the Defense Production Act of 1950 (except Title VI) or other phases of the nation's defense production program.

(6) Nothing herein shall be construed to delegate any function not permitted by the order or the statute to be delegated.

[SEAL] CHARLES F. BRANNAN,
Secretary of Agriculture.

[F. R. Doc. 50-8360; Filed, Sept. 21, 1950; 8:52 a. m.]

Rural Electrification Administration

[Administrative Order 2920]

ALLOCATION OF FUNDS FOR LOANS

AUGUST 10, 1950.

Inasmuch as Duck River Electric Membership Corporation has transferred certain of its properties and assets to Meriwether-Lewis Electric Cooperative, and Meriwether-Lewis Electric Cooperative has assumed in part the indebtedness to United States of America, of Duck River Electric Membership Corporation, arising out of loans made by United States of America pursuant to the Rural Electrification Act of 1936, as amended, I hereby amend:

(a) Administrative Order No. 971, dated October 9, 1945, by changing the project designation appearing therein as "Tennessee 21H Franklin" in the amount of $525,000 to read "Tennessee

21H Franklin" in the amount of $508,087.43 and "Tennessee 32 Hickman (Tennessee 21H Franklin)" in the amount of $16,912.57.

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8308; Filed, Sept. 21, 1950; 8:48 a. m.]

[Administrative Order 2921]

MISSISSIPPI

LOAN ANNOUNCEMENT

AUGUST 29, 1950.

Pursuant to the provisions of the Rural Electrification Act of 1936, as amended, a loan contract bearing the following designation has been signed on behalf of the Government acting through the Administrator of the Rural Electrification Administration:

Loan designation:	*Amount*
Mississippi 19C Holly Springs Public	$325,000

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8309; Filed, Sept. 21, 1950; 8:49 a. m.]

[Administrative Order 2922]

INDIANA

LOAN ANNOUNCEMENT

AUGUST 29, 1950.

Pursuant to the provisions of the Rural Electrification Act of 1936, as amended, a loan contract bearing the following designation has been signed on behalf of the Government acting through the Administrator of the Rural Electrification Administration:

Loan designation:	*Amount*
Indiana 81L Sullivan	$100,000

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8310; Filed, Sept. 21, 1950; 8:49 a. m.]

[Administrative Order 2923]

ALLOCATION OF FUNDS FOR LOANS

SEPTEMBER 1, 1950.

Inasmuch as Lane County Electric Cooperative, Inc. has transferred certain of its properties and assets to Garkane Power Association, Incorporated, and Garkane Power Association, Incorporated, has assumed in part the indebtedness to United States of America, of Lane County Electric Cooperative, Inc., arising out of loans made by United States of America pursuant to the Rural Electrification Act of 1936, as amended, I hereby amend:

(a) Administrative Order No. 579, dated April 28, 1941, as amended by Administrative Order No. 1364, dated October 24, 1947, and Administrative Order No. 2424, dated December 22, 1949, by changing the project designation appearing therein as "Oregon 18 Eugene (Idaho 1-0014GM1 Valley)" in the amount of $11,100 to read "Oregon 18 Eugene (Idaho 1-0014GM1 Valley)" in the amount of $600 and "Utah 6 Garfield (Oregon 18 Eugene [Idaho 1-0014GM1 Valley])" in the amount of $10,500.

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8311; Filed, Sept. 21, 1950; 8:49 a. m.]

[Administrative Order 2924]

MINNESOTA

LOAN ANNOUNCEMENT

SEPTEMBER 1, 1950.

Pursuant to the provisions of the Rural Electrification Act of 1936, as amended, a loan contract bearing the following designation has been signed on behalf of the Government acting through the Administrator of the Rural Electrification Administration:

Loan designation:	*Amount*
Minnesota 80L Lincoln	$135,000

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8312; Filed, Sept. 21, 1950; 8:49 a. m.]

[Administrative Order T-1]

VIRGINIA

LOAN ANNOUNCEMENT

JULY 25, 1950.

Pursuant to the provisions of the Rural Electrification Act of 1936, as amended, a loan contract bearing the following designation has been signed on behalf of the Government acting through the Administrator of the Rural Electrification Administration:

Loan designation:	*Amount*
Virginia 501-A	$55,000

[SEAL] GEORGE W. HAGGARD,
Acting Administrator.

[F. R. Doc. 50-8313; Filed, Sept. 21, 1950; 8:49 a. m.]

[Administrative Order T-2]

INDIANA

LOAN ANNOUNCEMENT

AUGUST 29, 1950.

Pursuant to the provisions of the Rural Electrification Act of 1936, as amended, a loan contract bearing the following designation has been signed on behalf of the Government acting through the Administrator of the Rural Electrification Administration:

Loan designation:	*Amount*
Indiana 501-A	$45,000

[SEAL] CLAUDE R. WICKARD,
Administrator.

[F. R. Doc. 50-8314; Filed, Sept. 21, 1950; 8:49 a. m.]

FEDERAL POWER COMMISSION

[Docket Nos. G-587, G-607, G-608, G-776, G-810, G-820, G-1222, G-1441]

GREENFIELD GAS CO., INC., ET AL.

ORDER CONSOLIDATING PROCEEDINGS AND FIXING DATE OF HEARING

SEPTEMBER 14, 1950.

In the matters of Greenfield Gas Company, Inc., *v.* Panhandle Eastern Pipe Line Company, Docket Nos. G-587, G-607; Eastern Indiana Gas Company, et al., Docket Nos. G-608, G-776, G-810, G-820; Indiana Gas & Water Company, Inc., Docket No. G-1222; Indiana Gas & Water Company, Inc., Docket No. G-1441.

On June 15, 1949, the Commission issued an order in Docket No. G-1222 instituting a proceeding for the purpose of determining whether, by reason of the operations described in said order, Indiana Gas & Water Company, Inc. (Indiana Gas) is a "natural-gas company" within the meaning of the Natural Gas Act. A hearing was ordered to be held on July 6, 1949, with respect to the matters involved and the issues presented by the petition of Indiana Gas for "Declaratory Order To Settle Controversy and Remove Uncertainty," filed in Docket No. G-1200, and with respect to the matters involved and the issues presented in the proceeding in Docket No. G-1222. By such order issued June 15, 1949, the Commission reopened the proceedings in Dockets Nos. G-587, G-607, and G-608, and in Docket Nos. G-776, G-810, and G-820, for certain specific purposes and provided that they be consolidated with the proceedings in Docket Nos. G-1200 and G-1222 for the purposes of hearing.

On June 24, 1949, Indiana Gas filed a "Notice of Withdrawal of Petition" filed in Docket No. G-1200. In accordance with § 1.11 of the Commission's rules of practice and procedure the notice is deemed to have effected the withdrawal of the petition.

By order issued July 1, 1949, upon motion of Indiana Gas the hearing in these consolidated proceedings was postponed to a date to be fixed by further order of the Commission.

On March 20, 1950, Indiana Gas filed its response to the Commission's order issued June 15, 1949, averring, among other things, that the Commission has the burden of proof to establish that it has jurisdiction over Indiana Gas, and requesting, for the reasons stated in said response, that the order to show cause be dismissed without further proceedings.

On July 12, 1950, Indiana Gas filed an application, Docket No. G-1441, for a certificate of public convenience and necessity, pursuant to section 7 of the Natural Gas Act, authorizing the acquisition and operation by Indiana Gas of certain facilities comprising the gas systems of Eastern Indiana Gas Company, Summit Gas and Water Company, Inc., and Knightstown Natural Gas Company, Inc., as an alternative to a request for an order disclaiming jurisdiction over the proposed acquisition and operation by Indiana Gas of the facilities of said companies.

The Commission finds: Good cause exists for consolidating the proceeding in Docket No. G–1441 with the proceedings in Docket Nos. G–1222, G–587, G–607, G–608, G–776, G–810 and G–820, for purposes of hearing.

The Commission orders:

(A) The application of Indiana Gas & Water Company, Inc., in Docket No. G–1441, be consolidated for purposes of hearing with the proceedings in Docket Nos. G–1222, G–587, G–607, G–608, G–776, G–810 and G–820.

(B) A public hearing be held on October 16, 1950, at 10:00 a. m. (e. s. t.) in the Hearing Room of the Federal Power Commission, 1800 Pensylvania Avenue NW., Washington, D. C., with respect to (1) the matters involved and the issues presented by the application in Docket No. G–1441, (2) the matters involved and issues presented in the proceeding in Docket No. G–1222, and (3) the limited matters involved in the reopened proceedings in Docket Nos. G–587, G–607, G–608, G–776, G–810, and G–820 as set forth in said order of June 15, 1949.

(C) Interested State commissions may participate as provided by §§ 1.8 and 1.37 (f) (18 CFR 1.8 and 1.37 (f)) of the Commission's rules of practice and procedure.

Date of issuance: September 15, 1950.

By the Commission.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8302; Filed, Sept. 21, 1950; 8:48 a. m.]

[Project No. 457]

IDAHO POWER CO.

NOTICE OF ORDER

SEPTEMBER 19, 1950.

Notice is hereby given that, on September 15, 1950, the Federal Power Commission issued its order entered September 12, 1950, accepting surrender of license (major) in the above-designated matter.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8303; Filed, Sept. 21, 1950; 8:48 a. m.]

[Project No. 553]

CITY OF SEATTLE, WASH.

NOTICE OF ORDER

SEPTEMBER 19, 1950.

Notice is hereby given that, on September 15, 1950, the Federal Power Commission issued its order entered September 12, 1950, authorizing amendment of license (major) in the above-designated matter.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8304; Filed, Sept. 21, 1950; 8:48 a. m.]

[Project No. 1549]

LARRY LUCAS

NOTICE OF ORDER

SEPTEMBER 19, 1950.

Notice is hereby given that, on September 15, 1950, the Federal Power Commission issued its order entered September 12, 1950, authorizing issuance of new license (minor) in the above-designated matter.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8305; Filed, Sept. 21, 1950; 8:48 a. m.]

[Project Nos. 2026, 1551]

UGANIK FISHERIES, INC.

NOTICE OF ORDER

SEPTEMBER 19, 1950.

Notice is hereby given that, on September 15, 1950, the Federal Power Commission issued its order entered September 12, 1950, issuing major license to Uganik Fisheries, Inc. for Project No. 2026, and accepting surrender of minor license for Project No. 1551.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8306; Filed, Sept. 21, 1950; 8:48 a. m.]

[Docket No. G–1472]

PANHANDLE EASTERN PIPE LINE CO.

NOTICE OF APPLICATION

SEPTEMBER 18, 1950.

Take notice that on August 30, 1950, Panhandle Eastern Pipe Line Company, (Applicant), a Delaware Corporation with its principal office at Kansas City, Missouri, filed an application for a certificate of public convenience and necessity, pursuant to section 7 of the Natural Gas Act, as amended, authorizing the construction and operation of metering and regulating equipment at a point on Applicant's 22 inch transmission pipeline, west of Delta, Ohio, for delivery of natural gas to The Toledo Edison Company for distribution and sale in Delta, Ohio.

Applicant states that it has been requested to construct the facilities above described by the The Ohio Gas Company and the Toledo Edison Company so as to obviate the necessity of using a 2-inch pipeline which had been in service for many years and was in a bad state of repair as shown by the application for abandonment filed with this Commission at Docket No. G–1293.

Applicant further states that no increase in volumes of gas will be made availabe for service to The Toledo Edison Company through the new connection.

The total overall cost of the facilities installed is $6,800.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington 25, D. C., in accordance with the rules of practice and procedure (18 CFR 1.8 and 1.10) on or before the 6th day of October 1950. The application is on file with the Commission for public inspection.

[SEAL] LEON M. FUQUAY,
Secretary.

[F. R. Doc. 50-8319; Filed, Sept. 21, 1950; 8:50 a. m.]

GENERAL SERVICES ADMINISTRATION

SECRETARY OF DEFENSE

DELEGATION OF AUTHORITY TO REPRESENT THE GOVERNMENT IN THE MATTER OF SOUTHERN COUNTIES GAS CO.

1. Pursuant to the provisions of sections 201 (a) (4) and 205 (d) and (e) of the Federal Property and Administrative Services Act of 1949, Public Law 152, 81st Congress, authority to represent the interests of the executive agencies of the Federal Government and to appear as witnesses and counsel for the executive agencies of the Federal Government in the matter of the Application Number 31161 of the Southern Counties Gas Company, before the Public Utilities Commission of the State of California is hereby delegated to the Secretary of Defense.

2. The Secretary of Defense is hereby authorized to redelegate any of the authority contained herein to any officer, official or employee of the Department of Defense.

3. The authority conferred herein shall be exercised in accordance with the policies, procedures and controls prescribed by the General Services Administration and shall further be exercised in cooperation with the responsible officers, officials and employees of such Administration.

4. This delegation of authority shall be effective as of the date hereof.

Dated: September 18, 1950.

JESS LARSON,
Administrator.

[F. R. Doc. 50-8318; Filed, Sept. 21, 1950; 8:50 a. m.]

HOUSING AND HOME FINANCE AGENCY

Federal Housing Administration

2½ PERCENT WAR HOUSING INSURANCE FUND DEBENTURES, SERIES H

NOTICE OF FOURTH CALL FOR PARTIAL REDEMPTION, BEFORE MATURITY

SEPTEMBER 11, 1950.

The notice of Fourth Call for partial redemption, before maturity of 2½ percent War Housing Insurance Fund Debentures, Series H, dated September 22, 1948, is hereby amended to read as follows:

Pursuant to the authority conferred by the National Housing Act (48 Stat. 1246; U. S. C., title 12, sec. 1701 et seq.)

as amended, public notice is hereby given that 2½ percent War Housing Insurance Fund Debentures, Series H, of the denominations and serial numbers designated below, are hereby called for redemption, at par and accrued interest, on January 1, 1949, on which date interest on such debentures shall cease:

2½ PERCENT WAR HOUSING INSURANCE FUND DEBENTURES, SERIES H

Denomination:	*Serial Numbers (all numbers inclusive)*
$50	689 to 721
	3,005 to 3,018
$100	2,713 to 2,802
	8,010 to 8,049
$500	762 to 808
	4,003 to 4,015
$1,000	3,602 to 3,638
	9,013 to 9,073
$5,000	179 to 200
	1,003 to 1,006
$10,000	2,930 to 3,285
	5,001 to 5,060

The debentures first issued as determined by the issue dates thereof were selected for redemption by the Commissioner, Federal Housing Administration, with the approval of the Secretary of the Treasury.

No transfers or denominational exchanges in debentures covered by the foregoing call will be made on the books maintained by the Treasury Department on or after October 1, 1948. This does not affect the right of the holder of a debenture to sell and assign the debenture on or after October 1, 1948, and provision will be made for the payment of final interest due on January 1, 1949, with the principal thereof to the actual owner, as shown by the assignments thereon.

The Commissioner of the Federal Housing Administration hereby offers to purchase any debentures included in this call at any time from October 1, 1948, to December 31, 1948, inclusive, at par and accrued interest, to date of purchase.

Instructions for the presentation and surrender of debentures for redemption on or after January 1, 1949, or for purchase prior to that date will be given by the Secretary of the Treasury.

WALTER L. GREENE,
Acting Commissioner.

Approved: September 18, 1950.

JOHN W. SNYDER,
Secretary of the Treasury.

[F. R. Doc. 50-8324; Filed, Sept. 21, 1950; 8:51 a. m.]

2¾ PERCENT MUTUAL MORTGAGE INSURANCE FUND DEBENTURES, SERIES E

NOTICE OF FIFTH CALL FOR PARTIAL REDEMPTION, BEFORE MATURITY

SEPTEMBER 11, 1950.

The notice of Fifth Call for Partial Redemption, before maturity, of 2¾ percent Mutual Mortgage Insurance Fund Debentures, Series E, dated March 20, 1950, is hereby amended to read as follows:

Pursuant to the authority conferred by the National Housing Act (48 Stat. 1246; U. S. C., title 12, sec. 1701 et seq.) as amended, public notice is hereby given that 2¾ percent Mutual Mortgage Insurance Fund Debentures, Series E, of the denominations and serial numbers designated below, are hereby called for redemption, at par and accrued interest, on July 1, 1950, on which date interest on such debentures shall cease:

2¾ PERCENT MUTUAL MORTGAGE INSURANCE FUND DEBENTURES, SERIES E

Denomination:	*Serial numbers (All numbers inclusive)*
$50	2,002 to 2,023
$100	2,002 to 2,081
$500	28 to 48
	2,514 to 2,525
$1,000	6,001 to 6,091
$5,000	1,202 to 1,214
$10,000	301

The debentures first issued as determined by the issue dates thereof were selected for redemption by the Commissioner, Federal Housing Administration, with the approval of the Secretary of the Treasury.

No transfers or denominational exchanges in debentures covered by the foregoing call will be made on the books maintained by the Treasury Department on or after April 1, 1950. This does not affect the right of the holder of a debenture to sell and assign the debenture on or after April 1, 1950, and provision will be made for the payment of final interest due on July 1, 1950, with the principal thereof to the actual owner, as shown by the assignments thereon.

The Commissioner of the Federal Housing Administration hereby offers to purchase any debentures included in this call at any time from April 1, 1950, to June 30, 1950, inclusive, at par and accrued interest, to date of purchase.

Instructions for the presentation and surrender of debentures for redemption on or after July 1, 1950, or for purchase prior to that date will be given by the Secretary of the Treasury.

WALTER L. GREENE,
Acting Commissioner.

Approved: September 18, 1950.

JOHN W. SNYDER,
Secretary of the Treasury.

[F. R. Doc. 50-8325; Filed, Sept. 21, 1950; 8:51 a. m.]

SECURITIES AND EXCHANGE COMMISSION

[File No. 812-682]

AMERICAN GENERAL CORP. ET AL.

NOTICE OF APPLICATION

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington, D. C., on the 18th day of September A. D. 1950.

In the matter of American General Corporation, The Morris Plan Corporation of America, The Bank of Akron Company, M. S. Richardson, C. B. Alexander, W. A. Allen, Robert H. Collacott, George W. Crouse, Jr., Wilford Holcomb, Martin D. Kuhlke, H. W. Slabaugh, F. D. Spangenberg, Caroline Strazan, Francis Wolcott, W. E. Slabaugh, File No. 812-682.

Notice is hereby given that The Morris Plan Corporation of America (Morris Plan), 103 Park Avenue, New York 17, New York, has filed an application under section 17 (b) of the Investment Company Act of 1940 for an order of the Commission exempting from section 17 (a) of the act, the proposed purchase from Morris Plan by certain individuals of 310 shares of the capital stock of The Bank of Akron Company (Akron), 323 South Main Street, Akron, Ohio, at a price of $290 per share, or a total purchase price of $89,900, less any dividends declared and paid after August 1, 1950.

American General Corporation is a registered investment company with offices at 103 Park Avenue, New York 17, New York. American General Corporation owns in excess of 60 percent of the voting stock of Morris Plan. Morris Plan owns 15.5 percent of the outstanding capital stock of Akron.

Eleven of the twelve individuals who propose to purchase stock of Akron are officers and/or directors of Akron and the twelfth is the owner of 5 percent of the outstanding capital stock of Akron. Therefore, each is an affiliated person of Akron. The eleven persons who are officers and/or directors of Akron are M. S. Richardson, C. B. Alexander, W. A. Allen, Robert H. Collacott, George W. Crouse, Jr. Wilford Holcomb, Martin D. Kuhlke, H. W. Slabaugh, F. D. Spangenberg, Caroline Strazan and Francis Wolcott; 5 percent of Akron's outstanding capital stock is owned by W. E. Slabaugh.

The proposed transactions involve purchases by affiliated persons of an affiliated person of a registered investment company, from a controlled person of such company, of securities of which the seller is not the issuer. Such transactions are made unlawful by section 17 (a) of the act unless an exemption therefrom is granted by the Commission under section 17 (b) of the act. Morris Plan, accordingly, requests an order pursuant to section 17 (b) of the act exempting the proposed transactions from the prohibitions of section 17 (a) of the act.

Akron was organized in 1918 under the general corporation laws of Ohio with an authorized capital of $100,000 consisting of 1,000 shares of stock of the par value of $100 per share. An additional 1,000 shares was issued in 1930. In 1918, Morris Plan purchased 50 shares by original subscription at $110 per share. In 1924 and 1925 105 shares were acquired at $110 per share. In 1930, pursuant to the exercise of "rights", Morris Plan subscribed to 155 shares at $105 per share. The principal business of Akron consists of making various types of loans to individuals and to business organizations. Its operations have been successful from the beginning. As of June 30, 1950, Akron had combined capital, surplus and undivided profits of over $540,000. During the ten years 1940 to 1949, inclusive, the earnings of Akron ranged from a low of $7.45 (1942) per share to a high of $28.50 (1949) per share. For the first six months of 1950, its earnings were equivalent to $17.00 per share. The book value of Akron's stock as of June

30, 1950, was approximately $272 per share and the application asserts that it is estimated approximately $302 per share might be realized upon liquidation although no intention exists of liquidating the company. Applicant states that there is no established market for the capital stock of Akron and asserts that the price of $290 per share agreed upon between the parties is fair and equitable to both seller and purchasers.

No director, officer, agent or employee of Morris Plan is a director, officer, agent or employee of Akron; and, conversely, no director, officer, agent or employee of Akron is a director, officer, agent or employee of any affiliated person thereof other than Akron.

For a more detailed statement of the matters of fact and law asserted, all persons are referred to said application which is on file in the offices of the Commission in Washington, D. C.

Notice is further given that an order granting the application, in whole or in part and upon such conditions as the Commission may deem necessary or appropriate, may be issued by the Commission at any time after October 6, 1950, unless prior thereto a hearing upon the application is ordered by the Commission, as provided in Rule N-5 of the rules and regulations promulgated under the act. Any interested person may, not later than October 4, 1950, at 5:30 p. m., submit to the Commission in writing his views or any additional facts bearing upon this application or the desirability of a hearing thereon, or request the Commission in writing that a hearing be held thereon. Any such communication or request should be addressed: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C., and should state briefly the nature of the interest of the person submitting such information or requesting a hearing, the reasons for such request, and the issues of fact or law raised by the application which he desires to controvert.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8294; Filed, Sept. 21, 1950; 8:46 a. m.]

[File No. 70-2475]

ALABAMA POWER CO.

NOTICE OF FILING

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington D. C., on the 15th day of September A. D. 1950.

Notice is hereby given that an application-declaration has been filed with this Commission pursuant to the Public Utility Holding Company Act of 1935 (the "act") by Alabama Power Company ("Alabama"), a registered holding company and a public utility company which is a subsidiary of The Southern Company, also a registered holding company. The applicant-declarant has designated section 6 (b) of the act and Rules U-50 and U-62 promulgated thereunder as applicable to the proposed transaction.

Notice is further given that any interested person may, not later than September 29, 1950, at 5:30 p. m., e. s. t., request the Commission in writing that a hearing be held on such matter, stating the reasons for such request, the nature of his interest, and the issues of fact or law raised by said application-declaration which he desires to controvert, or may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed as follows: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C. At any time after 5:30 p. m., e. s. t., on September 29, 1950, said application-declaration, as filed or as amended, may be granted and permitted to become effective as provided in Rule U-23 of the rules and regulations promulgated under the act, or the Commission may exempt such transaction as provided in Rule U-20 (a) and Rule U-100 thereof.

All interested persons are referred to said application-declaration which is on file in the offices of the Commission for a statement of the transaction therein proposed, which is summarized as follows:

Alabama proposes to issue and sell, pursuant to the competitive bidding requirements of Rule U-50, 100,000 shares of its cumulative ____ percent preferred stock, $100 par value. The dividend rate on such preferred stock and the price to the company (to be not less than $100 per share nor more than $102.75) are to be determined by competitive bidding. In the event that the successful bid specifies a dividend rate of 4.20 percent, Alabama proposes to issue shares of its presently authorized but unissued 4.20 percent preferred stock. If the successful bidder specifies a dividend rate on the new preferred stock other than 4.20 percent, Alabama proposes to solicit proxies for use at a special meeting of stockholders to authorize a new class of preferred stock.

The filing states that Alabama anticipates making expenditures of approximately $62,200,000 during 1950, 1951, and 1952 for the construction of property additions. In order to finance, in part, such construction program the company will use the proceeds from the sale of the new preferred stock, cash on hand and estimated to be received from operations, and $6,000,000 expected to be received from the proposed sale to The Southern Company of 60,000 additional shares of Alabama's common stock (Holding Company Act Release No. 10092). The company estimates that, based upon the present level of earnings, and current expectations of the probable progress of its construction program, approximately $7,000,000 of additional funds will have to be provided before the end of 1951, and approximately $10,000,000 more before the end of 1952. To the extent necessary, Alabama expects to issue additional securities of a type not yet determined.

The proposed transaction has been expressly authorized by the Alabama Public Service Commission, the State Commission of the State in which Alabama is organized and doing business.

The applicant-declarant has requested that the Commission's order be issued as soon as possible and that it become effective forthwith upon issuance.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8295; Filed, Sept. 21, 1950; 8:46 a. m.]

[File No. 70-2459]

PENNSYLVANIA GAS & ELECTRIC CORP. ET AL.

ORDER REGARDING LIQUIDATION AND DISSOLUTION

At a regular session of the Securities and Exchange Commission held at its office in the city of Washington, D. C., on the 15th day of September A. D. 1950.

In the matter of Pennsylvania Gas & Electric Corporation, New Penn Development Corporation, Penn-Western Service Corporation; File No. 70-2459.

The Commission having issued an order dated December 22, 1949, (Holding Company Act Release No. 9574) pursuant to section 11 (b) (2) of the Public Utility Holding Company Act of 1935 (the "act"), directing that Pennsylvania Gas & Electric Corporation ("Penn Corp"), a registered holding company, liquidate and dissolve; and

Penn Corp, New Penn Development Corporation ("New Penn"), a non-utility subsidiary of Penn Corp, and Penn-Western Service Corporation ("Penn-Western"), the mutual service company for the Penn Corp holding company system, having filed on August 7, 1950, pursuant to Rule U-44 (c) of the rules and regulations under the act, a Notice of Intention of Penn Corp to sell its holdings of all the outstanding 80,160 shares of capital stock of New Penn to Goodman Pipe Corporation, a non-affiliated company, in accordance with the terms and conditions contained in an agreement dated August 4, 1950, for a cash consideration of $811,620; said agreement containing provisions for the transfer by New Penn to Penn-Western of 170 shares of the capital stock of Penn-Western for a nominal consideration not exceeding $10 in the aggregate; and

The Commission having examined the filing and having determined that the proposed transactions constitute a reasonable and appropriate method of compliance with said order of December 22, 1949, directing that Penn Corp liquidate and dissolve, and the Commission being of the view that the proposed transfer of the service company stock is in accordance with a program as to ownership of securities of Penn-Western which the Commission has heretofore found to meet the requirements of section 13 of the act (1 S. E. C. 562), and the Commission finding that the requirements of Rules U-40 (b) and U-43 (b) (3) are satisfied and deeming it unnecessary to require the filing of an application-declaration with respect to the proposed transactions; and

The filing having requested that the Commission issue an order containing the recitals, itemizations and specifications required by Supplement R and section 1808 (f) of the Internal Revenue Code:

It is hereby ordered and recited, That the following transactions are necessary or appropriate to the integration or simplification of the holding company system of which Penn Corp, New Penn and Penn-Western are members, and are necessary or appropriate to effectuate the provisions of section 11 (b) of the act, 49 Stat. 820 (U. S. C., Title 15, sec. 79K (b)) within the meaning of Supplement R and section 1808 (f) of the Internal Revenue Code, and are hereby authorized, permitted and approved:

1. The sale, transfer, and delivery by Penn Corp to Goodman Pipe Corporation of the 80,160 shares of common capital stock of New Penn for a cash consideration of $811,620.

2. The sale, transfer and delivery by New Penn to Penn-Western of 170 shares of the common capital stock of Penn-Western for a cash consideration not exceeding $10 in the aggregate.

3. The expenditure by Penn Corp of $600,000 of the net proceeds from the sale by Penn Corp of the 80,160 shares of common capital stock of New Penn for the payment of a short-term note issued on August 28, 1950, by Penn Corp to Bank of the Manhattan Company in the amount of $600,000.

It is further ordered and recited, That the Commission reserves jurisdiction to determine by subsequent order or orders herein the expenditure, distribution or investment (except temporary investment in securities of the United States of America) that shall be made, within twenty-four (24) months of said sale of the 80,160 shares of common capital stock of New Penn, of the balance of the net proceeds from such sale, or an amount equivalent thereto, as may hereafter be proposed by Penn Corp and as may be shown to be necessary or appropriate to the integration or simplification of the holding company system of which Penn Corp is a member, and necessary or appropriate to effectuate the provisions of section 11 (b) of the act.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8296; Filed, Sept. 21, 1950; 8:46 a. m.]

[File No. 70-2381]

WISCONSIN ELECTRIC POWER CO. AND WISCONSIN NATURAL GAS CO.

ORDER RELEASING JURISDICTION OVER FEES AND EXPENSES

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington, D. C., on the 15th day of September 1950.

The Commission by order dated May 26, 1950, having granted and permitted to become effective joint applications-declarations, as amended, filed by Wisconsin Electric Power Company ("Wisconsin Electric"), a registered holding company and a public utility company, and its public utility subsidiary, Wisconsin Natural Gas Company ("Wisconsin Gas"), pursuant to the applicable provisions of the Public Utility Holding Company Act of 1935, with respect to, among other matters, the issuance and sale by Wisconsin Electric of $15,000,000 principal amount of its First Mortgage Bonds, 2¾ Percent Series, due 1980; the issuance and sale by Wisconsin Electric, for cash to its common stockholders, of a maximum of 585,405 additional shares of its Common Stock, par value $10 per share, on the basis of one share for each five shares held; the issuance and sale by Wisconsin Gas of $3,500,000 principal amount of its First Mortgage Bonds 2⅞ Percent Series, due 1975; the sale of its electric properties by Wisconsin Gas to Wisconsin Electric; and certain related transactions; and having in said order reserved jurisdiction over all fees and other expenses incurred or to be incurred in connection therewith; and

The Commission, by supplemental order, dated June 6, 1950, having, inter alia, released jurisdiction over certain miscellaneous fees and expenses, including regulatory expenses and expenses of printing and engraving, to be paid by Wisconsin Electric, amounting to $194,300, of which 112,500 was allocable to the bond issuance and sale and $81,800 to the common stock issuance and sale, and over similar items aggregating $48,650, to be paid by Wisconsin Gas, and having, in said supplemental order continued the jurisdiction previously reserved over all other fees and expenses incurred or to be incurred in connection therewith; and

Further information having been filed concerning the nature and extent of the services rendered, and the fees and expenses proposed to be paid therefore, as set forth below:

Requested by—	To be paid by—		
	Wisconsin Electric		Wisconsin Gas
	For services relating to—		
	Bond financing and property acquisition	Common stock financing	Bond financing
Central Hanover Bank & Trust Co.—transfer and warrant agent:			
Fee		$37,700.86	
Expenses		10,042.23	
The Chase National Bank of the City of New York—register: fee		2,219.85	
First Wisconsin Trust Co.—registrar and warrant agent:			
Fee		13,679.70	
Expenses		2,920.20	
J. Samuel Hartt—engineer:			
Fee	835.00		
Expenses	30.35		
Price, Waterhouse & Co.—accountant:			
Fee	4,500.00		5,500.00
Expenses	182.46		324.47
Sullivan & Cromwell—company counsel:			
Fee	15,000.00	10,000.00	8,500.00
Expenses	[1] 1,500.00		1,250.00
Cahill, Gordon, Zachry & Reindel—counsel for underwriters:			
Fee	[2] 10,000.00		[2] 8,000.00
Expenses	700.00		500.00
Total fees and expenses	32,747.81	76,562.84	24,074.47

[1] Expenses of $1,500 are unsegregated between the bond and common stock financing.

[2] To be paid by successful bidder.

It appearing to the Commission that the requested fees and expenses and the proposed allocation thereof are not unreasonable and that jurisdiction over such fees and expenses should be released:

It is ordered, That jurisdiction heretofore reserved in the Commission's Order, dated May 26, 1950, and continued in its Supplemental Order, dated June 6, 1950, over the fees and expenses set forth above be, and the same hereby is, released.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8297; Filed, Sept. 21, 1950; 8:46 a. m.]

[File No. 70-2473]

NEW ENGLAND ELECTRIC SYSTEM AND WEYMOUTH LIGHT AND POWER COMPANY

NOTICE OF FILING

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington, D. C., on the 15th day of September A. D. 1950.

Notice is hereby given that a joint application has been filed with this Commission pursuant to the Public Utility Holding Company Act of 1935, by New England Electric System ("NEES"), a registered holding company, and its subsidiary company, Weymouth Light and Power Company ("Weymouth"). Applicants designate sections 6 (b), 7 and 10 of the act and Rules U-23, U-24, and U-42 (b) (2) promulgated thereunder as applicable to the proposed transactions.

All interested persons are referred to said application, which is on file in the office of this Commission, for a statement of the transactions therein proposed, which may be summarized as follows:

Weymouth proposes to issue and sell 16,298 shares of additional Capital Stock, par value $25 each (aggregate par value $407,450), and to issue warrants to its shareholders to subscribe for such shares in proportion to their holdings. The subscription price of $35 per share (the total subscription price aggregating $570,430) was determined by Weymouth's board of directors and is subject to the approval of the Department of Public Utilities of the Commonwealth of Massachusetts. Each warrant will expire on the 21st day following the mailing thereof and will indicate the number of new shares or the fraction of a new share to which the holder thereof is entitled to subscribe. Fractional warrants can be combined but no fractional shares will be issued.

Weymouth presently has outstanding 48,893 shares of capital stock. NEES owns 48,682 shares of such stock (99.568 percent) and will receive warrants to subscribe for 16,227⅓ additional shares. The minority public shareholders own 211 shares of such capital stock (0.432 percent) and will receive warrants to subscribe for an aggregate of 70⅓ new shares. Waymouth proposes to sell any shares unsubscribed for by its shareholders at public auction or directly to NEES at the price of $35 per share, provided the same is authorized by the Department of Public Utilities of Massachusetts.

NEES proposes to exercise its right to subscribe for the additional shares of capital stock of Weymouth to which it will be entitled. NEES further proposes to bid $35 per share for all unsubscribed shares sold at public auction, or, in the event that the consent of the Department of Public Utilities of Massachusetts is obtained, to purchase such shares directly from Weymouth at the price of $35 per share.

Total expenses to be borne by Weymouth for services performed in connection with the proposed sale of said common shares are estimated at $3,152. Such estimate includes $2,000 for services rendered at the actual cost thereof by New England Power Service Company, an affiliated service company. The cost to NEES for services to be rendered by such service company is estimated not to exceed $500.

Weymouth will use the proceeds to be derived from the proposed sale of additional common shares, estimated at $570,430, to pay off its non-interest bearing advances from NEES in the amount of $50,000 and to retire the $430,000 principal amount of notes payable to banks and presently bearing interest at the rate of 2¾ percent per annum and the balance of $90,430 remaining will be applied by Weymouth to the cost of extensions, enlargements and additions to plant and property subsequent to October 31, 1949. The application states that, the Department of Public Utilities of the Commonwealth of Massachusetts has jurisdiction over the transactions proposed by Weymouth and that no Federal commission, other than this Commission, has jurisdiction over the proposed transactions.

The applicants request that the order of this Commission be made effective forthwith upon issuance.

Notice is further given, that any interested person may, not later than September 27, 1950, at 5:30 p. m., e. s. t., request the Commission in writing that a hearing be held on such matter, stating the nature of his interest, the reason for such request, and the issues, if any, of fact or law proposed to be controverted; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C. At any time after said date, said application, as filed or as amended, may be granted as provided in Rule U-23 of the rules and regulations promulgated under the act, or the Commission may exempt such transactions as provided in Rules U-20 and U-100 thereof.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8298; Filed, Sept. 21, 1950; 8:47 a. m.]

[File No. 70-2474]

NEW ENGLAND ELECTRIC SYSTEM

NOTICE OF FILING

At a regular session of the Securities and Exchange Commission held at its office in the city of Washington, D. C., on the 15th day of September A. D. 1950.

Notice is hereby given that New England Electric System ("NEES"), a registered holding company, has filed a declaration with this Commission pursuant to the Public Utility Holding Company Act of 1935 regarding the sale by Haverhill Electric Company ("Haverhill Electric"), a public utility subsidiary company of NEES, of its gas properties to the Haverhill Gas Light Company, a non-affiliated gas utility company. NEES has designated section 12 (d) of the act and Rule U-44 (a) promulgated thereunder as applicable to the proposed transactions.

Notice is further given that any interested person may, not later than September 25, 1950, at 5:30 p. m., e. s. t., request the Commission in writing that a hearing be held on such matter, stating the reasons for such request, the nature of his interest and the issues of fact or law raised by said declaration which he desires to controvert, or may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C. At any time after September 25, 1950, said declaration, as filed or as amended, may be permitted to become effective as provided in Rule U-23 of the rules and regulations promulgated under the act, or the Commission may exempt such transactions as provided in Rule U-20 (a) and Rule U-100 thereof.

All interested persons are referred to said declaration, which is on file in the offices of this Commission, for a statement of the transactions therein proposed, which are summarized as follows:

Haverhill Electric, a Massachusetts corporation doing an electric and gas utility business in Massachusetts, proposes to sell its gas properties and franchises, as at June 30, 1950, to Haverhill Gas Light Company for a cash consideration of $197,000, plus or minus an amount equal to the net plant additions or retirements subsequent to June 30, 1950. Haverhill Electric also proposes to sell to Haverhill Gas Light Company its gas accounts receivable not billed prior to the date of the transfer of the gas properties, amounts due on conditional sales contracts for the sale of gas appliances, and gas materials and supplies at the fair value thereof at the date of transfer. It is stated in the declaration that the consideration for such accounts and materials is not expected to exceed $10,000.

Haverhill Electric supplies gas to approximately 2,600 customers and its gas plant and business constitute approximately 4 percent of its total utility plant and business. Its gas requirements are purchased from Haverhill Gas Light Company. It is stated in the declaration that the base purchase price of $197,000 was arrived at by negotiations between the two companies and that consideration was given to the depreciated book value of the gas properties, amounting as at June 30, 1950, to $214,455, and to the past, present and potential earning capacity of such properties. It is indicated that Haverhill Electric's net operating income from the gas properties for the twelve months ended June 30, 1950, approximated $9,500. The declaration states that Haverhill Electric will use the proceeds derived from the proposed sale to reduce its 2¾ percent promissory note indebtedness, which as at June 30, 1950, amounted to $500,000.

It is estimated in the declaration that the total expenses in connection with the proposed transactions, including the expenses for services performed by New England Power Service Company, an affiliated service company, will be approximately $2,017.

NEES, the declarant, states that the proposed sale and acquisition of Haverhill Electric's gas properties and franchises is subject to the jurisdiction of the Department of Public Utilities of the Commonwealth of Massachusetts and is not subject to the jurisdiction of any Federal regulatory body other than this Commission. NEES requests that this Commission's order be made effective upon issuance.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8299; Filed, Sept. 21, 1950; 8:47 a. m.]

[File No. 55-94]

INTERNATIONAL HYDRO-ELECTRIC SYSTEM

NOTICE OF FILING OF APPLICATION FOR APPROVAL OF MAXIMUM INTERIM COMPENSATION

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington, D. C., on the 15th day of September A. D. 1950.

Notice is hereby given that Oliver R. Waite of Brickley, Sears and Cole, 1 Federal Street, Boston, Massachusetts, has filed with this Commission an application pursuant to Rule U-63 promulgated under section 11 (f) of the Public Utility Holding Company Act of 1935 ("the act"), for approval of $10,000 as the maximum amount for which application may be made to the District Court of the United States for the District of Massachusetts ("the Court") for an interim allowance for his services rendered as counsel to Bartholomew A. Brickley, Trustee of International Hydro-Electric System ("IHES"), a registered holding company, for the period from August 1, 1948, to January 27, 1950, inclusive.

All interested persons are referred to said application on file in the offices of the Commission for a statement of the services rendered, which are summarized as follows:

The applicant has been employed since May 19, 1947, as counsel to assist the Trustee in connection with proceedings pursuant to section 11 (d) of the act for the liquidation and dissolution of IHES. For his services prior to August 1, 1948, he has been paid $10,000, pursuant to orders of the Commission and the Court. He now requests the Commission to fix $10,000 as the maximum amount for which he may apply to the Court for interim compensation for his services from August 1, 1948, to January 27, 1950, inclusive, during which period he states that he devoted 814 hours to the work, plus unrecorded time in conferences with the Trustee, estimated at an additional 100 hours. Applicant's detailed statement of recorded time indicates work in connection with the drafting of the Trustee's Second Plan, in preparing for and attending hearings before the Commission and the Court, and in various ancillary matters.

Notice is further given that any interested person may, not later than September 25, 1950, at 5:30 p. m., e. s. t., request the Commission in writing that a hearing be held on such matter, stating the nature of his interest, the reasons for such request, and the issues, if any, of fact or law raised by said application which he proposes to controvert; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C. At any time after September 25, 1950, said application, as filed or as amended, may be granted without public hearing; or the Commission may exempt such transaction as provided in Rules U-20 and U-100 thereof.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8300; Filed, Sept. 21, 1950; 8:47 a. m.]

[File No. 70-2471]

DELAWARE POWER AND LIGHT CO.

ORDER PERMITTING DECLARATION TO BECOME EFFECTIVE

At a regular session of the Securities and Exchange Commission, held at its office in the city of Washington, D. C., on the 18th day of September A. D. 1950.

Delaware Power and Light Company ("Delaware"), a registered holding company and utility company, having filed a declaration, pursuant to sections 6 (a) and 7 of the Public Utility Holding Company Act of 1935 and Rule U-50 of the general rules and regulations promulgated thereunder, with respect to the following proposed transaction:

Delaware proposes to issue and sell, pursuant to the competitive bidding requirements of Rule U-50, $12,000,000 principal amount of its First Mortgage and Collateral Trust Bonds ____ percent series due 1980. The interest rate and the price to the company for the bonds will be determined by competitive bidding except that the invitation for bids will specify that the price to the company shall not be less than 100 percent nor more than 102.75 percent of the principal amount.

The proceeds from the sale of such securities will be used to finance a portion of the construction program of Delaware and its subsidiaries. It is estimated that the construction program for the years 1950 to 1951 inclusive will require expenditures of $38,000,000. Of such estimated requirements, approximately $4,750,000 has been obtained from the sale of 232,520 shares of common stock in April 1950, $19,000,000 will be obtained from treasury funds, retained earnings, and provisions for amortization and depreciation, and $12,000,000 will be obtained from the bonds now proposed to be sold. The company states that it has no present plans for the sale of any additional securities, if such may be required to complete its construction program.

Appropriate notice of said filing having been given in the form and manner prescribed by Rule U-23 promulgated pursuant to said act, and the Commission not having received a request for hearing with respect to said declaration within the period specified, or otherwise, and not having ordered a hearing thereon; and

The Commission finding with respect to said declaration that the requirements of the applicable provisions of the act and rules thereunder are satisfied, that no adverse findings are necessary thereunder, and deeming it appropriate in the public interest and in the interests of investors and consumers that the said declaration be permitted to become effective forthwith:

It is hereby ordered, Pursuant to said Rule U-23 and the applicable provisions of said act, that said declaration be, and the same hereby is, permitted to become effective forthwith, subject to the terms and conditions prescribed in Rule U-24 and to the further condition that the proposed issuance and sale of bonds shall not be consummated until the results of competitive bidding, pursuant to Rule U-50, have been made a matter of record herein and a further order shall have been entered with respect thereto, which order shall contain such further terms and conditions as may then be deemed appropriate, for which purpose jurisdiction be, and the same hereby is, reserved.

It is further ordered, That jurisdiction be, and the same hereby is, reserved over all fees and expenses to be incurred in connection with the proposed transaction.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F. R. Doc. 50-8301; Filed, Sept. 21, 1950; 8:47 a. m.]